Life Science

TOP Offers

-15 %

Secondary antibodies at Carl ROTH

In cooperation with antibodies.com

Discover high-quality secondary antibodies with optimally matched conjugates for immunofluorescence, flow cytometry, ELISA, western blotting, and immunohistochemistry – ideal for reliable applications in research and development.

Conjugate	Typical application
Unconjugated	Assay development, custom conjugation
AP	ELISA, Western Blot, IHC
Biotin	ELISA, IHC, signal amplification
Cy3	Immunofluorescence, multiplexing
Cy5	Immunofluorescence, confocal microscopy
Cy5.5	Near-IR fluorescence analysis
FITC	Immunofluorescence, flow cytometry
HRP	ELISA, Western Blot, IHC
HRP-Polymer	Highly sensitive IHC
PE	Flow cytometry
TRITC	Immunofluorescence

Discover our range of secondary antibodies here:

Valid from 1 October to 31 December 2026

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INT

Alternatives to FBS

-10 %

Human Platelet Lysate (HPL)

Human platelet lysate (HPL) is increasingly used as a functional substitute for fetal bovine serum (FBS) in cell culture. Compared with FBS, HPL offers several key advantages: it is free of animal-derived components, exhibits significantly lower batch-to-batch variability, and thereby contributes to improved reproducibility.

It also demonstrates high efficacy and performance relative to FBS. Due to its human origin, HPL further supports the clinical translatability of experimental results.

It is a growth factor-rich supplement obtained through an upcycling process from platelet units that are no longer suitable for transfusion, collected at blood donation centers. The stored growth factors are released through freeze-thaw cycles and processed in GMP-certified facilities.

Sustainability

Animal-free: Contains no animal-derived components

EU regulation compliant: Produced under controlled manufacturing conditions

Upcycling product: Resource-efficient production

High efficacy: Approximately 50 % less material required compared to FBS

❄❄ S

HPL ELAREM™ Perform-FD PLUS

Research Grade, fibrinogen-depleted, EU origin

PL BioScience.

Supplement for cell culture.

ELAREM™ Perform-FD PLUS Research Grade is a fibrinogen-depleted and anticoagulant-free Human Platelet Lysate of EU origin. As a xeno-free and easy-to-use cell culture supplement, ELAREM™ Perform-FD PLUS Research Grade supports the efficient and safe in vitro expansion of various primary cells and cell lines.

All the advantages at a glance:

- **Efficiency**: Only 25–50 % of the FBS amount required
- **Performance**: Faster cell proliferation, higher cell quality
- **Safety**: Human origin, no animal pathogens
- **Reproducibility**: Minimal batch-to-batch variation
- **Time-saving**: No lengthy testing phases, better results
- **Clinical relevance**: Directly translatable to clinical applications

The product is fibrinogen-depleted. The addition of anticoagulants is not required.

Storage temperature: –20 °C
Transport temperature: frozen

Not a medical device / Not an IVD product

Art. No.	Pack Qty.	Pack.	€	€
3NAT.1	50 ml	plastic	~~268,75~~	241,85
3NAT.2	100 ml	plastic	~~473,00~~	425,70
3NAT.3	500 ml	plastic	~~1773,75~~	1596,35

-20 %

Defined FBS Replacement ROTI®Cell Zerum

ROTI®Cell Zerum is a serum-free alternative to conventional fetal bovine serum (FBS). Its defined formulation combines growth-promoting trace elements, proteins, and selected animal-derived protein fractions to provide cells with all essential factors required for optimal growth.

The carefully optimized formulation enables cell performance comparable to FBS and, at the same time, ensures controlled and reproducible culture conditions. As a result, ROTI®Cell Zerum promotes robust cell culture and delivers reliable and consistent results.

All the advantages at a glance:

- **0% FBS:** Serum-free alternative to FBS
- **Reproducibility:** Defined formulation
- **Performance:** Cell performance at FBS level
- **Ready-to-use:** Direct replacement without workflow adaptation
- **Application range:** Compatible with a wide variety of cell types
- **Expertise:** Developed based on many years of expertise

Sustainability

Serum-free – elimination of fetal bovine serum (FBS) collection

Resource-efficient – no lengthy testing phases

Handling – ready to use

NEW/+ ❄❄ S Low Endotoxin

Defined FBS Replacement ROTI®Cell Zerum

CELLPURE®, sterile

Defined FBS alternative.

Directions for use

FBS can typically be directly substituted with ROTI®Cell Zerum without the need for prior stepwise adaptation. The working concentration and handling should be adjusted according to standard FBS conditions. Otherwise, a concentration of 10% is recommended.

ROTI®Cell Zerum is suitable for a wide range of adherent and suspension cell cultures. Successfully tested cell models include epithelial, renal, and fibroblast cell lines, as well as primary immune cells and keratinocytes. In all investigated models, reliable cell growth and high cell viability were observed.

Storage temperature: –20 °C
Transport temperature: frozen

Not a medical device / Not an IVD product

Art. No.	Pack Qty.	Pack.	€	€
2AGN.1	100 ml	plastic	~~91,20~~	73,10
2AGN.2	500 ml	plastic	~~387,00~~	309,60

For serum-reduced cell culture

-20 %

❄❄ S Low Endotoxin

Fetal Bovine Serum (FBS) LowCalf, South America

CELLPURE® sterile

Serum-reduced supplement for cell culture

Collected in South America.

Sustainability

The FBS LowCalf was specially developed to minimize the use of foetal calf serum in cell culture. To achieve this, 50% of the FBS has been replaced by a carefully balanced mixture of chemical growth-promoting factors such as insulin, transferrin, trace elements and amino acids.

This growth cocktail provides the cells with all the essential nutrients for optimal growth. In numerous cell lines, FBS LowCalf has even proven to be superior to standard FBS, as the cultivated cells exhibit better viability and less cell stress at the same time.

As a result, FBS LowCalf is not only a more sustainable alternative to conventional FBS, but also impresses with its performance.

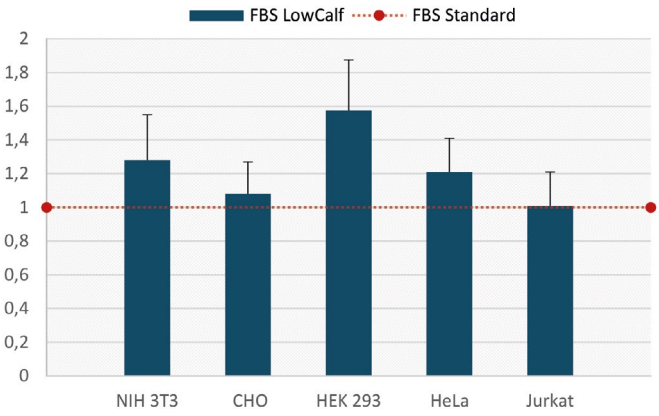
Storage temperature: –20 °C
Transport temperature: frozen

Not a medical device / Not an IVD product

Art. No.	Pack Qty.	Pack.	€	€
286H.1	100 ml	plastic	~~68,30~~	**54,60**
286H.2	500 ml	plastic	~~282,20~~	**225,75**

Advantages:

- Only 50% serum content
- Optimized cultivation results
- Proven reduction in cell stress
- Less batch to batch variation
- Alternative to conventional FBS



Cell Viability Assay
Relative cell viability of various cell lines cultured in 10% FBS LowCalf.

Peptones

Low Endotoxin

-20 %

Peptones, as protein hydrolysates (PHL), offer a rich composition of amino acids, peptides, vitamins, carbohydrates, nucleosides, minerals, and other constituents. They are essential in the cultivation of various cell lines, serving as a partial substitute for fetal bovine serum (FBS) in chemically defined or serum-reduced cell culture media. Peptones have been demonstrated to significantly enhance cell growth and protein synthesis, making them particularly valuable in the production of biopharmaceutical products and vaccines.

Special Properties

Our cell culture peptones have been proven to achieve improved cell growth and optimized cell performance compared to other peptones suitable for cell culture. This is due to a unique manufacturing process that enables peptone purification without ultrafiltration. As a result, the endotoxin content is significantly lower than the usual levels. At the same time, essential growth factors and other nutrients are maximally preserved.

All the advantages at a glance:

- Minimal endotoxin content (≤ 200 EU/g)
- Increased content of nutrients and growth factors
- Optimized cell growth
- Improved cell performance
- For the support of serum-reduced cell cultures

Product name	Purity	Instructions for use	Art. No.	Pack Qty.	€	€
Peptone ex casein	< 200 EU/g, for cell culture	For use in mammalian cell cultures.	**1T90.1**	500 g	~~166,65~~	**133,30**
			1T90.2	1 kg	~~310,70~~	**248,50**
			1T90.3	2.5 kg	~~650,40~~	**520,30**
Peptone ex meat	< 200 EU/g, for cell culture	For use in mammalian cell cultures.	**1T91.1**	250 g	~~94,50~~	**75,55**
			1T91.2	500 g	~~166,65~~	**133,30**
			1T91.3	1 kg	~~310,70~~	**248,50**
			1T91.4	2.5 kg	~~650,40~~	**520,30**
Soy Peptone	< 200 EU/g, animal-free/GMO-free, for cell culture	For use in mammalian cell cultures.	**1T92.1**	250 g	~~94,50~~	**75,55**
			1T92.2	500 g	~~166,65~~	**133,30**
			1T92.3	1 kg	~~310,70~~	**248,50**
			1T92.4	2.5 kg	~~650,40~~	**520,30**
Wheat Peptone	< 200 EU/g, animal-free/GMO-free, for cell culture	For use in mammalian cell cultures.	**2AKM.1**	200 g	~~95,70~~	**76,50**
			2AKM.2	500 g	~~193,50~~	**154,80**
			2AKM.3	1 kg	~~333,30~~	**266,60**
			2AKM.4	2.5 kg	~~731,00~~	**584,80**

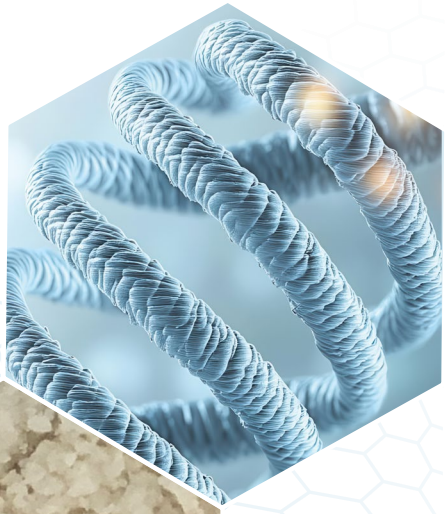
Safety information and additional data at www.carlroth.com

Tissue Engineering

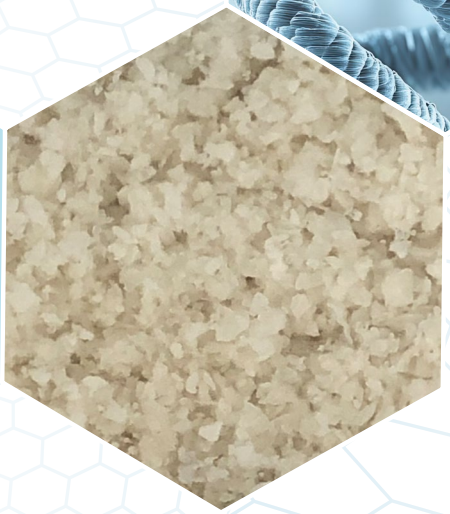
-20 %

Structural Molecules of Connective Tissue

The goal of tissue engineering is to recreate human tissue and to investigate and understand the interactions between various structural molecules. Based on this knowledge and the optimal combination of connective tissue components, researchers in the field of bioprinting work to create the most suitable possible environment for cells. The cosmetics and food industries also use these insights to develop products that provide the body with key building blocks for the maintenance and regeneration of tissues.



- **Raw material from certified and highly specialized production facilities in Europe**
- **Very high purity for reliable results**
- **CELLPURE® - Low endotoxin levels for sensitive applications**
- **Available in various quality grades**



Low Endotoxin

Product name	Purity	Endotoxin content	General application	Additional info	Art. No.	Pack Qty.	€	€
Collagen type I, native	>50%, Ultra Quality, low endotoxin, bovine, acid soluble	≤0,5 U/mg	Soluble, molecular collagen with intact native triple helix as well as N- and C-terminal telopeptides (telocollagen).	Source: Bovine	**23M7.1**	2 g	~~124,70~~	**99,75**
					23M7.2	10 g	~~482,70~~	**386,10**
Collagen type I, solution	0,1% (w/v) in HCl, low endotoxin, bovine, sterile-filtered	≤0,1 U/ml	Ready-to-use collagen solution for biomaterials science, 3D cell culture, and tissue engineering.	Source: Bovine	**23M8.1**	25 ml	~~358,00~~	**286,35**
					23M8.2	100 ml	~~857,85~~	**686,25**
	0,4% (w/v) in HCl, low endotoxin, bovine, sterile-filtered	≤0,1 U/ml	Ready-to-use collagen solution for biomaterials science, 3D cell culture, and tissue engineering.	Source: Bovine	**23M9.1**	25 ml	~~376,25~~	**301,00**
					23M9.2	100 ml	~~933,10~~	**746,45**
	0,5% (w/v) in HCl, low endotoxin, bovine, sterile-filtered	≤0,1 U/ml	Ready-to-use collagen solution for biomaterials science, 3D cell culture, and tissue engineering.	Source: Bovine	**23MA.1**	25 ml	~~408,50~~	**326,80**
					23MA.2	100 ml	~~1056,95~~	**847,95**
Elastin, hydrolyzed	>90 % elastin peptides, soluble	≤10 U/mg	Soluble elastin hydrolysate for research, tissue engineering, or biomaterial development.	Source: Porcine	**22G1.1**	1 g	~~29,50~~	**23,20**
					22G1.2	5 g	~~97,90~~	**78,25**
					22G1.3	10 g	~~163,50~~	**130,70**
	>90 % elastin peptides, high-molecular-weight (21 kDa), soluble	≤10 U/mg	Soluble elastin hydrolysate for research, tissue engineering, or biomaterial development.	Source: Porcine	**23UT.1**	1 g	~~202,50~~	**161,65**
					23UT.2	5 g	~~829,90~~	**663,90**
	>90 % elastin peptides, low-molecular-weight (9-10 kDa), soluble	≤10 U/mg	Soluble elastin hydrolysate for research, tissue engineering, or biomaterial development.	Source: Porcine	**23UU.1**	1 g	~~213,95~~	**171,10**
					23UU.2	5 g	~~884,75~~	**707,75**
Hyaluronic acid sodium salt	≥95 %, Ultra Quality, low endotoxin, MW 8-250 kDa	≤0,5 U/mg	High-purity sodium hyaluronate with low molecular weight for applications in cell culture and tissue engineering.	Source: *Streptococcus equi* subsp. *zooepidemicus*	**2AUH.1**	1 g	~~29,10~~	**23,20**
					2AUH.2	5 g	~~123,65~~	**98,90**
					2AUH.3	20 g	~~354,75~~	**283,80**
					2AUH.4	50 g	~~741,75~~	**593,40**
	≥95 %, Ultra Quality, low endotoxin, MW 250-1000 kDa	≤0,5 U/mg	High-purity sodium hyaluronate with low to medium molecular weight for applications in cell culture and tissue engineering.	Source: *Streptococcus equi* subsp. *zooepidemicus*	**2AUK.1**	1 g	~~30,10~~	**24,05**
					2AUK.2	5 g	~~127,95~~	**102,30**
					2AUK.3	20 g	~~365,50~~	**292,40**
					2AUK.4	50 g	~~774,00~~	**619,20**
	≥95 %, Ultra Quality, low endotoxin, MW 1000-1600 kDa	≤0,5 U/mg	High-purity sodium hyaluronate with medium to high molecular weight for applications in cell culture and tissue engineering.	Source: *Streptococcus equi* subsp. *zooepidemicus*	**2AUL.1**	1 g	~~30,10~~	**24,05**
					2AUL.2	5 g	~~127,95~~	**102,30**
					2AUL.3	20 g	~~365,50~~	**292,40**
					2AUL.4	50 g	~~774,00~~	**619,20**
	≥95 %, Ultra Quality, low endotoxin, MW >1600 kDa	≤0,5 U/mg	High-purity sodium hyaluronate with high molecular weight for applications in cell culture and tissue engineering.	Source: *Streptococcus equi* subsp. *zooepidemicus*	**2AUM.1**	1 g	~~22,60~~	**18,05**
					2AUM.2	5 g	~~95,70~~	**76,50**
					2AUM.3	20 g	~~281,65~~	**225,30**
					2AUM.4	50 g	~~570,85~~	**456,65**

Not medical devices / Not IVD products.
For safety information and additional data, see www.carlroth.com

Inhibitors

-20 %

Individual Inhibitors

Product name	Purity	General application	Art. No.	Pack Qty.	€	€
AEBSF hydrochloride	≥97 %, for biochemistry	Inhibitor of serine proteases	**2931.1**	25 mg	~~27,85~~	**22,25**
			2931.2	100 mg	~~60,10~~	**48,05**
			2931.3	500 mg	~~241,90~~	**193,50**
Antipain dihydrochloride	≥30 U/mg, for biochemistry	Serine/cysteine protease inhibitor and in general of proteases similar to trypsin. Isolated from *Streptomyces*.	**2933.1**	5 mg	~~79,45~~	**63,50**
			2933.2	25 mg	~~274,15~~	**219,30**
Aprotinin	≥3,0 PEU/mg, for biochemistry	Inhibitor for inhibition of serin proteases, lyophilized and made of beef lung.	**A162.1**	10 mg	~~51,50~~	**41,15**
			A162.2	50 mg	~~160,20~~	**128,10**
			A162.3	100 mg	~~282,20~~	**225,75**
			A162.5	250 mg	~~585,90~~	**468,70**
			A162.4	500 mg	~~1101,90~~	**881,50**
E-64	≥99 %, for biochemistry	Inhibitor of cysteine proteases.	**2935.1**	5 mg	~~117,20~~	**93,70**
			2935.2	25 mg	~~439,70~~	**351,70**
Pefabloc® SC-Protease Inhibitor	≥95 %, for biochemistry	Irreversible inhibitor of serine proteases.	**A154.1**	100 mg	~~93,45~~	**74,70**
			A154.2	500 mg	~~381,65~~	**305,30**
			A154.3	1 g	~~693,40~~	**554,70**
Pepstatin A	≥98 %, for biochemistry	Inhibitor von sauren Proteasen / Aspartatproteasen	**2936.1**	5 mg	~~41,40~~	**33,10**
			2936.2	25 mg	~~131,70~~	**105,35**
			2936.3	100 mg	~~424,65~~	**339,70**
	≥95 %, synthetic	Inhibitor von sauren Proteasen / Aspartatproteasen	**39Y2.1**	5 mg	~~42,90~~	**34,25**
			39Y2.2	25 mg	~~150,50~~	**120,40**
			39Y2.3	100 mg	~~516,00~~	**412,80**
Phenylmethyl sulphonyl fluoride	≥98 %, for biochemistry	Irreversible inhibitor of serine- and thiol proteases. Reversible effect on cysteine proteases.	**6367.4**	348 mg	~~19,90~~	**15,90**
			6367.1	5 g	~~42,90~~	**34,25**
			6367.2	25 g	~~138,70~~	**110,90**
			6367.3	100 g	~~418,20~~	**334,50**
Trypsin inhibitor -30 %	≥10 000 BAEE U/mg	Made from soybeans. Highly active inhibitor for trypsin, weakly inhibitory for chymotrypsin, plasmin, kallikrein, thrombin.	**2949.1**	25 mg	~~40,75~~	**28,45**
			2949.2	100 mg	~~102,70~~	**71,85**
			2949.3	250 mg	~~203,20~~	**142,20**
			2949.4	500 mg	~~349,40~~	**244,55**
			2949.5	1 g	~~607,40~~	**425,15**
	≥7 000 BAEE U/mg, salt-free	Made from soybeans. Inhibition of trypsin, chymotrypsin, plasmin, kallikrein, thrombin and other proteolytic enzymes; free from salt.	**5279.1**	100 mg	~~61,20~~	**42,75**
			5279.4	250 mg	~~131,70~~	**92,15**
			5279.5	500 mg	~~241,90~~	**169,30**
			5279.2	1 g	~~461,20~~	**322,80**
			5279.3	5 g	~~2203,75~~	**1542,60**

For safety information and additional data, see www.carlroth.com

Inhibitor cocktails

Inhibitor Cocktail Tissue

for biochemistry, EDTA free

Cocktail of protease inhibitors for extracts of mammalian cells or tissue. Without EDTA.

Inhibitor cocktail. Inhibits serine proteases, esterases, c ysteine proteases, and trypsin-like proteases.

Storage temperature: –20 °C
Transport temperature: ambient temp.

Danger H314

Art. No.	Pack Qty.	Pack.	€	€
3755.1	0.5 g	plastic	~~66,55~~	**53,20**

Inhibitor Cocktail Plus

ready-to-use

ready-to-use, for biochemistry, EDTA free

Broad range cocktail of protease inhibitors for extracts of mammalian cells or tissue. Without EDTA.

Inhibitor cocktail for inhibition of a broad range of proteases. Inhibits serine proteases, esterases, aminopeptidase B, leucine-aminopeptidases, cysteine proteases, trypsin-like proteases, and aspartic proteases.

1 ml is sufficient for inhibition of proteases from approx. 20 g cells or tissue.

Storage temperature: –20 °C
Transport temperature: cooled

Warning H315-H319

Art. No.	Pack Qty.	Pack.	€	€
3751.1	1 ml	plastic	~~134,40~~	**107,50**

Inhibitor Cocktail His-tag

ready-to-use

ready-to-use, for biochemistry, EDTA free

Broad range cocktail of protease inhibitors for extraction of His-tagged proteins. Without EDTA.

Inhibitor cocktail for inhibition of a broad range of proteases. Inhibits serine proteases, aminopeptidase B, leucine-aminopeptidases, cysteine proteases, aspartic proteases, and metalloendopeptidases.

1 ml is sufficient for inhibition of proteases from 10 g bacterial cells.

Storage temperature: –20 °C
Transport temperature: cooled

Danger H315-H318

Art. No.	Pack Qty.	Pack.	€	€
3760.1	1 ml	plastic	~~134,40~~	**107,50**

Inhibitor Cocktail Bacteria

for biochemistry

Broad range cocktail of protease inhibitors for extracts from bacteria.

Inhibitor cocktail for inhibition of standard proteases. Inhibits serine proteases, aminopeptidase B, leucine-aminopeptidases, metallo-proteases, cysteine proteases, and aspartic proteases.

1 kit is sufficient for inhibition of proteases from approx. 20 g *E. coli*.

Storage temperature: –20 °C
Transport temperature: ambient temp.

Danger H314-H332-H373

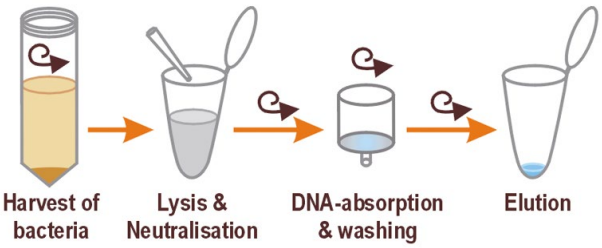
Art. No.	Pack Qty.	Pack.	€	€
3758.1	1 kit	plastic	~~138,70~~	**110,90**

DNA/RNA Isolation

-20 %

ROTI®Prep Kits – Column-based kits for the isolation of nucleic acids

Our ROTI®Prep kits are designed for the manual extraction of nucleic acids from various starting materials. The column-based kits enable fast, safe and uncomplicated purification of nucleic acids without the use of toxic phenol. The isolated nucleic acids are highly pure and can be used in all common subsequent applications.



ROTI®Prep Plant DNA

Kit for isolation of genomic DNA from various plant tissues.

ROTI®Prep Plant DNA is designed to isolate genomic DNA from various plant sources.
The isolation is performed from homogenised plant material, which is then treated with one of the lysis buffers included in the kit. The kit contains three different lysis buffers in order to optimally cope with the diversity of plant starting materials.

Possible basic material:

- Blossoms
- Leaves
- Roots
- Stems
- Wooden parts
- Seeds
- Grains

Storage temperature: +15 to +25 °C

Danger H225-H315-H317-H319-H334-H335-H336-H410

Not a medical device / Not an IVD product

Art. No.	Packaging	Pack Qty.	Pack.	€	€
20H4.1	10 preparations	1 kit	cardboard	~~77,95~~	**62,35**
20H4.2	50 preparations	1 kit	cardboard	~~278,45~~	**222,70**
20H4.3	250 preparations	1 kit	cardboard	~~919,15~~	**735,30**

ROTI®Prep Genomic DNA MINI

Kit for isolation of genomic DNA from tissues, rodent tails, FFPE tissues, buccal swabs, cell cultures.

Roti®Prep Genomic DNA MINI has been developed for the isolation of genomic DNA from various sources.
The isolation is carried out through the proven and reliable spin column technique, which is very easy to handle and needs only few steps.

Possible basic material:

- Tissue (up to 40 mg)
- Rodent tails (0,5–1 cm)
- FFPE tissue (formalin-fixed, paraffin-embedded)
- Buccal swabs
- Cell culture (up to $5x10^6$ cells)

Storage temperature: +15 to +25 °C
Transport temperature: ambient temp.

Danger H225-H315-H317-H319-H334-H335-H336

Not a medical device / Not an IVD product

Art. No.	Packaging	Pack Qty.	Pack.	€	€
8472.1	10 preparations	1 kit	cardboard	~~64,40~~	**51,45**
8472.2	50 preparations	1 kit	cardboard	~~213,95~~	**171,10**
8472.3	250 preparations	1 kit	cardboard	~~772,95~~	**618,30**

ROTI®Prep Forensic

Kit for the isolation of genomic DNA from forensic samples.

ROTI®Prep Forensic Kit has been developed for the rapid and efficient isolation of genomic DNA from forensic samples such as hair or hair roots, blood, saliva or sperm stains, fingernails, cigarette butts, chewing gum, buccal swabs, stamps, envelopes, and fingerprints on various surfaces.

Possible basic material:

- Swabs from various surfaces (e.g., cups, bottles, etc.)
- Blood samples
- Semen samples
- Hair, hair roots, or beard
- Envelopes
- Fingernails
- Cigarette butts or paper
- Chewing gum
- Tissue samples

Storage temperature: +15 to +25 °C/+4 °C (see components)
Transport temperature: ambient temp.

Danger H225-H302-H314-H317-H334-H335-H336-H412-EUH032

Not a medical device / Not an IVD product

Art. No.	Packaging	Pack Qty.	Pack.	€	€
379P.1	10 preparations	1 kit	cardboard	~~64,40~~	**51,45**
379P.2	50 preparations	1 kit	cardboard	~~224,70~~	**179,70**
379P.3	250 preparations	1 kit	cardboard	~~747,15~~	**597,70**

ROTI®Prep DNA & RNA Mini

Kit for simultaneous isolation of DNA and RNA from different starting materials.

ROTI®Prep DNA & RNA was developed to isolate both DNA and RNA separately from only one sample.
The isolation is based on the lysis of a starting sample, the lysate of which is first filtered through a centrifugation column, to the membrane of which the DNA is bound. The filtrate is then transferred to a second centrifugation column, which binds the RNA. The bound DNA and RNA are washed separately in the following steps and collected in separate reaction vessels at the end.

Possible basic material:

- Microbial cell cultures (max. $1x10^9$)
- Fungi and eukaryotic cell cultures (max. $5x10^6$)
- Tissue samples (up to 20 mg)

Storage temperature: +15 to +25 °C

Danger H302+H312+H332-H314-H412-EUH032

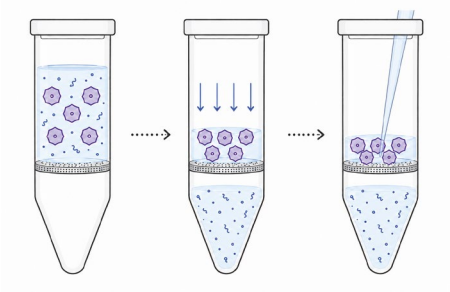
Not a medical device / Not an IVD product

Art. No.	Packaging	Pack Qty.	Pack.	€	€
20H8.1	10 preparations	1 kit	cardboard	~~75,15~~	**60,05**
20H8.2	50 preparations	1 kit	cardboard	~~310,70~~	**248,50**
20H8.3	250 preparations	1 kit	cardboard	~~1149,20~~	**919,30**

DNA/RNA Isolation

-20 %

Precipitation & Concentration



Centrifugation Filters ROTI®Spin

For purification and concentration of biomolecules and for purification of solutions.

Type:

- ROTI®Spin MINI: 1.5 ml sample tube for up to 500 µl sample
- ROTI®Spin MIDI: 15 ml sample tube for up to 5 ml sample
- ROTI®Spin MAXI: 50 ml sample tube for up to 15 ml sample

Centrifugal filters for ultrafiltration of biomolecules. The membranes made of highly chemical-resistant polyethersulfone have been tightly sealed to prevent leakage and loss of samples. Furthermore, the membranes underwent special treatment minimising the binding of biomolecules, in order to optimise sample recovery rates.
ROTI®Spin Centrifugal filters can be applied to a variety of applications and can be used to replace tedious and labour-intensive methods like gel filtration, gel purification or precipitation. Application is time-saving and very simple - only few centrifugal steps are necessary to concentrate and recover your sample. During this, the sample remains untouched in the upper reservoir, and cross-contamination is efficiently prevented even when large numbers of samples are handled.

Application examples

Desalting or buffer exchange following restriction digest, PCR or such; separation of free nucleotides and polymerised DNA; removal of contaminating compounds (like DNA) from stock solutions (e.g. PCR-buffers); concentration of DNA or proteins; separation of proteins of different size; sample preparation prior to HPLC.

Overview for selecting the appropriate pore size

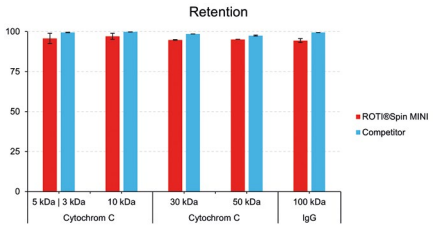
MWCO	Molecule size	DNA size
10 kDa	30 – 90 kDa	50 – 200 bp
30 kDa	90 – 180 kDa	200 – 500 bp
50 kDa	150 – 300 kDa	500 bp – 1 kb
100 kDa	>300 kDa	>1 kb

ROTI®Spin MINI

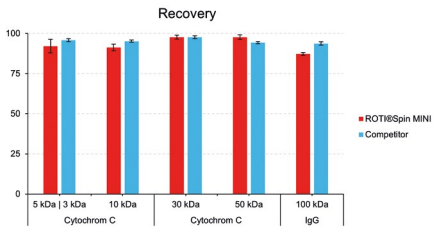
NEW / +

Sample volumes:
Initial volume: 50-500 µl
Final volume: 10-20 µl

MWCO:
Centrifugation units with membranes in 5 different molecular weight cut-offs (MWCO) are available for specific applications.
Select the appropriate MWCO according to the following rule of thumb:
Purification of proteins/peptides:
MWCO ≤1/3 of the sample molecule size.
Purification of nucleic acids:
MWCO ≤½ of the sample molecule size.



Retention rate (%) of ROTI®Spin MINI compared to a reference product. Ultrafiltration tubes with MWCO from 3 kDa to 100 kDa with corresponding proteins were tested.



Recovery rate (%) of ROTI®Spin MINI compared to a reference product. Ultrafiltration tubes with MWCO from 3 kDa to 100 kDa with corresponding proteins were tested.

General properties:

- Suitable for nucleic acids, proteins/peptides, other biomolecules >200 kDa, and very small bioparticles
- Replaces standard applications such as precipitation, dialysis, gel filtration, gel purification, column chromatography, gradient centrifugation, etc.
- Gentle: no shearing of DNA up to 100 kb, proteins remain native and enzymatically active
- Can be used without restriction on labeled samples (isotope, fluorescence, chromogenic labeling)
- Very high recovery rates: with a suitable MWCO, the yield is >90%.

Not a medical device / Not an IVD product

MWCO (kDa)	Art. No.	Pack Qty.	€	€
5	**3L59.1**	25 unit(s)	~~124,70~~	**99,75**
5	**3L59.2**	96 unit(s)	~~398,85~~	**319,05**
5	**3L59.3**	500 unit(s)	~~1827,50~~	**1462,00**
10	**3L5A.1**	25 unit(s)	~~124,70~~	**99,75**
10	**3L5A.2**	96 unit(s)	~~398,85~~	**319,05**
10	**3L5A.3**	500 unit(s)	~~1827,50~~	**1462,00**
30	**3L5C.1**	25 unit(s)	~~124,70~~	**99,75**
30	**3L5C.2**	96 unit(s)	~~398,85~~	**319,05**
30	**3L5C.3**	500 unit(s)	~~1827,50~~	**1462,00**
50	**3L5E.1**	25 unit(s)	~~124,70~~	**99,75**
50	**3L5E.2**	96 unit(s)	~~398,85~~	**319,05**
50	**3L5E.3**	500 unit(s)	~~1827,50~~	**1462,00**
100	**3L5H.1**	25 unit(s)	~~124,70~~	**99,75**
100	**3L5H.2**	96 unit(s)	~~398,85~~	**319,05**
100	**3L5H.3**	500 unit(s)	~~1827,50~~	**1462,00**

Horizontal Electrophoresis

-20 %

① 50 bp-DNA-Ladder ready-to-use

ready-to-use, not prestained

Number of lanes per ml: approx. 200 (mini gels)

Art. No.	Pack Qty.	Pack.	€	€
2810.1	500 µl	plastic	~~145,15~~	116,10

② 100 bp-DNA-Ladder *equimolar*

lyophilised, not prestained

Number of lanes per 100 µg: approx. 200 (mini gels)

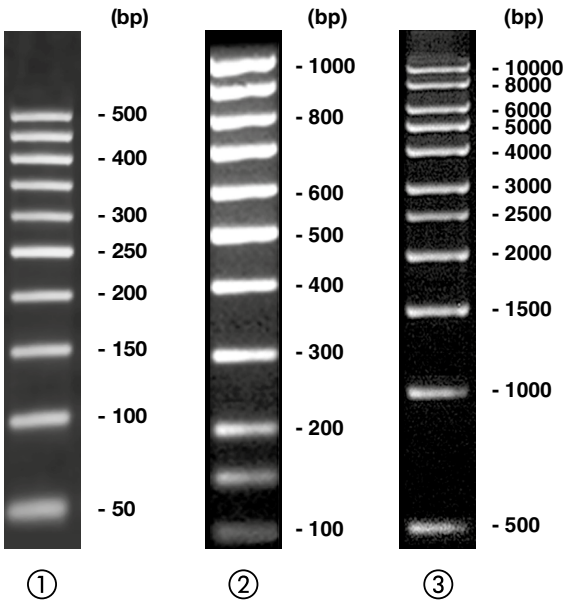
Art. No.	Packaging	Pack Qty.	Pack.	€	€
T834.1	1 x 50 µg	50 µg	plastic	~~104,85~~	83,85
T834.2	4 x 50 µg	200 µg	plastic	~~385,95~~	308,70

③ 1 kbp DNA-Ladder

lyophilised, not prestained

Number of lanes per 100 µg: approx. 200 (mini gels)

Art. No.	Packaging	Pack Qty.	Pack.	€	€
Y014.1	50 µg	50 µg	plastic	~~50,45~~	40,30
Y014.2	4x 50 µg	200 µg	plastic	~~172,00~~	137,60

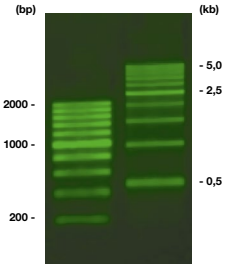


ready-to-use

-25 %

ROTI®Load DNAstain Green

Loading bufer with the fluorescent dye BrightGreen for staining of double stranded nucleic acid in agarose and polyacrylamide gels.



- Alternative for ethidium bromide, non-toxic, non-mutagen
- 20 times more sensitive than ethidium bromide, up to 0.01 ng nucleic acid per band
- For use with common broad-band ethidium bromide photo filters
- Excitation possible via UV light (254 nm) and blue light (495 nm)
- Compatible with all usual down-stream applications.

Art. No.	Packaging	Pack Qty.	Pack.	€	€
1CN5.1	1 x 1.8 ml	1.8 ml	plastic	~~56,90~~	42,60
1CN5.2	5 x 1.8 ml	9.0 ml	plastic	~~177,40~~	133,00

Art. No.	Packaging	Pack Qty.	Pack.	€	€
1CN6.1	1 x 1.8 ml	1.8 ml	plastic	~~56,90~~	42,60
1CN6.2	5 x 1.8 ml	9.0 ml	plastic	~~177,40~~	133,00

Art. No.	Packaging	Pack Qty.	Pack.	€	€
1CN7.1	1 x 1.8 ml	1.8 ml	plastic	~~56,90~~	42,60
1CN7.2	5 x 1.8 ml	9.0 ml	plastic	~~177,40~~	133,00

ready-to-use

ROTIPHORESE® 50x TAE Buffer

ROTIPHORESE® 50x conc.

Running buffer in DNA agarose gel electrophoresis..

TAE buffer has a lower buffer capacity than TBE and can be used with higher voltages, longer gels and larger DNA fragments. The gels heat up during running to a lesser extent than when using the running buffer TBE. DNA migrates in TAE gel about twice as fast as in TBE buffered gels.

2 M TRIS acetate., 50 mM EDTA., distilled, deionized water., Remark: The product may crystallise. Can be redissolved by heating (max. 40 °C).

Art. No.	Packaging	Pack Qty.	Pack.	€	€
CL86.1	1 x 1 l	1 l	glass	~~81,60~~	65,25
CL86.3	1 x 2.5 l	2.5 l	glass	~~149,45~~	119,50
CL86.2	1 x 5 l	5 l	plastic	~~231,15~~	184,90

-30 %

SEKUROKA® Decon-Bags

Carl ROTH.

Adsorber bags for removal of ethidium bromide from liquids.

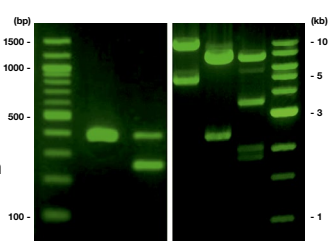
Suitable for adsorption of ethidium bromide, propidium iodide, PicoGreen® and SYBR® Green.

Art. No.	Pack Qty.	Pack.	€	€
T856.2	10 unit(s)	bag	~~32,15~~	22,45
T856.1	50 unit(s)	box	~~138,70~~	97,05
T856.3	250 unit(s)	box	~~590,20~~	413,10

ready-to-use

ROTI®GelStain

20 000x conc., ready-to-use



For non-toxic fluorescent staining of nucleic acids in agarose gels. Green fluorescence. Direct addition to the agarose solution.

- Green fluorescence
- Alternative for ethidium bromide, non-toxic and non-mutagenic
- For dsDNA, ssDNA and RNA
- Sensitivity comparable to ethidium bromide (approx. 0.3 ng / band)
- For use with common broad-band ethidium bromide photo filters

Art. No.	Packaging	Pack Qty.	Pack.	€	€
3865.1	1 x 1 ml	1 ml	plastic	~~138,70~~	110,90
3865.2	5 x 1 ml	5 ml	plastic	~~596,65~~	477,30

Vertical Electrophoresis

-20 %

ROTIPHORESE® gel solutions

Our ready-to-use acrylamide solutions

Product name	Purity	General application	Pack.	Art. No.	Pack Qty.	€	€
ROTIPHORESE®Gel 30 (37.5:1) -30 %	30 %, ready-to-use, gas-stabilized	Aqueous acrylamide and bisacrylamide stock solution at a ratio of 37,5:1 for preparation of protein gels.	glass	**3029.3**	250 ml	~~34,30~~	**23,95**
			plastic	**3029.5**	250 ml	~~36,45~~	**25,45**
			glass	**3029.2**	500 ml	~~52,15~~	**36,50**
			plastic	**3029.4**	500 ml	~~56,45~~	**39,50**
			glass	**3029.1**	1 l	~~88,70~~	**62,05**
ROTIPHORESE®Gel 40 (29:1)	40 %, ready-to-use, gas-stabilized	Aqueous acrylamide and bisacrylamide stock solution at a ratio of 29:1 for preparation of protein- or DNA gels.	glass	**A515.2**	250 ml	~~45,05~~	**36,00**
			plastic	**A515.4**	250 ml	~~47,20~~	**37,70**
				A515.3	500 ml	~~73,00~~	**58,35**
			glass	**A515.1**	1 l	~~109,70~~	**87,70**
ROTIPHORESE®Gel 40 (19:1)	40 %, ready-to-use, gas-stabilized	Aqueous acrylamide and bisacrylamide stock solution at a ratio of 19:1 for preparation of DNA gels.	glass	**3030.2**	250 ml	~~42,90~~	**34,25**
			plastic	**3030.4**	250 ml	~~45,70~~	**36,55**
				3030.3	500 ml	~~67,65~~	**54,05**
			glass	**3030.1**	1 l	~~103,10~~	**82,45**

Safety information and additional data at www.carlroth.com

ready-to-use -25 %

ROTI®Blue

5x conc.

Colloidal Coomassie® staining solution for protein gels..

Art. No.	Pack Qty.	Pack.	€	€
A152.2	250 ml	plastic	~~42,50~~	**31,80**
A152.1	1 l	plastic	~~123,65~~	**92,70**

ready-to-use -25 %

ROTI®Blue quick

1x conc., ready-to-use

For rapid, sensitive staining of protein gels..

Art. No.	Pack Qty.	Pack.	€	€
4829.1	250 ml	glass	~~112,90~~	**84,65**
4829.2	1 l	glass	~~428,95~~	**321,65**

Ponceau S (C.I. 27195)

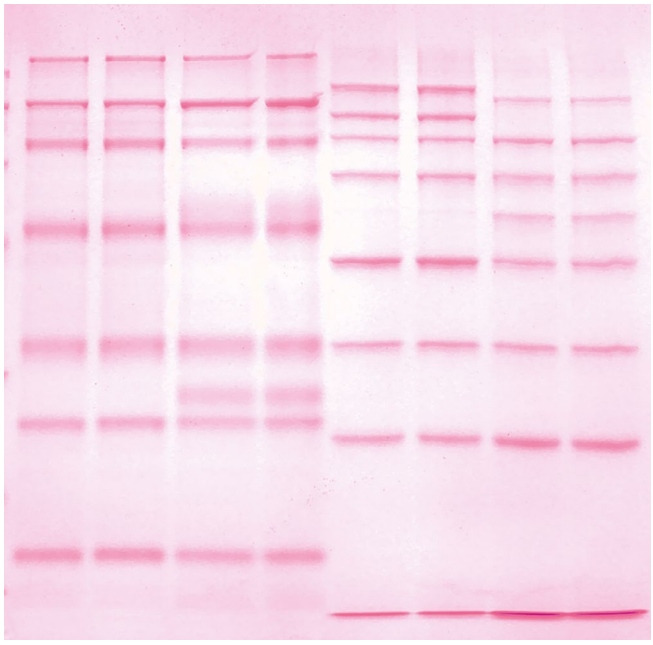
for histology and electrophoresis

For reversible protein staining on membranes and for microscopy.

Suitable for NC and PVDF membranes as well as prior to Western analyses.

Warning H315-H319-H335

Art. No.	Pack Qty.	Pack.	€	€
5938.2	10 g	glass	~~35,40~~	**28,25**
5938.1	25 g	glass	~~73,00~~	**58,35**



NEW / + ready-to-use -30 %

ROTIPHORESE® Ponceau S

ROTIPHORESE® ready-to-use, for electrophoresis

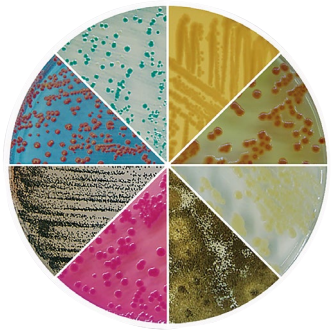
Carl ROTH.

Ready-to-use staining solution for detecting proteins on NC and PVDF membranes.

Art. No.	Pack Qty.	€	€
3P8K.1	500 ml	~~69,90~~	**48,90**
3P8K.2	1 l	~~102,15~~	**71,45**

Nutrient media additives for microbiology

-20 %



Discover the wide range of culture media additives that specifically support the growth and identification of microorganisms – for precise and reliable microbiological analyses.

Product name	General application	Art. No.	Pack Qty.	€	€
Ammonium iron(III) citrate solution	Media supplement for detection of *Listeria monocytogenes*.	**3130.1**	20 ml	~~58,60~~	**46,85**
Campylobacter Preston Supplement	For selective isolation of *Campylobacter spp.*	**8851.1**	10 unit(s)	~~521,40~~	**417,10**
Clostridium perfringens Supplement	Media supplement for selective isolation of *Clostridium perfringens.*	**CL52.1**	10 unit(s)	~~332,20~~	**265,70**
Egg Yolk Tellurite Emulsion	Media supplement for preparation of egg yolk tellurite agar, for detection of *Staphylococcus aureus*.	**0339.1**	100 ml	~~75,15~~	**60,05**
Kovacs' Reagent	Media supplement for detection of microbial indole.	**2950.1**	100 ml	~~65,50~~	**52,35**
Legionella BCYE Growth Supplement	Growth supplement for isolation of *Legionella.*	**CL49.1**	1 set	~~338,65~~	**270,90**
Listeria Chromo Lipase C Supplement	Media supplement for selective isolation of *Listeria*.	**2948.1**	10 unit(s)	~~155,90~~	**124,70**
Listeria Chromo Selective Supplement	Media supplement for selective isolation of *Listeria*.	**2947.1**	10 unit(s)	~~155,90~~	**124,70**
Listeria Oxford Supplement	Media supplement for selective isolation of *Listeria monocytogenes.*	**5801.1**	10 unit(s)	~~321,45~~	**257,10**
Listeria Palcam Supplement	Media supplement for selective isolation of *Listeria monocytogenes.*	**5803.1**	10 unit(s)	~~177,40~~	**141,90**
RPF Supplement	Media supplement for identification and enumeration of *Staphylococcus aureus.*	**6064.1**	10 unit(s)	~~590,20~~	**472,10**
TTC-Supplement	Media supplement for identification of coliform enterobacteria.	**CP72.1**	500 mg	~~110,20~~	**88,15**

Safety information and additional data at www.carlroth.com

-30 %

Microbiological rinsing solutions

For membrane filtration, sterility tests, and other microbiological analyses.

With our ready-to-use Fluids A, D and K, we offer you the right solution for reliable microbiological analyses and sterility testing according to **Ph. Eur.** and **USP**. Whether for standard applications, oil-containing samples, or preserved and antimicrobial products – our fluids support safe sample preparation, optimal membrane filtration, and reliable neutralization of inhibitory substances. Efficient, user-friendly, and perfectly tailored to the requirements of your microbiology laboratory.

Product name	Purity	Suitable for	Art. No.	Pack Qty.	€	€
Fluid A	acc. to Ph. Eur./USP, ISO 11133, *ready-to-use*, sterile, for microbiology	Suitable for standard applications in microbiological testing and sterility testing, as well as general sample preparation and membrane filtration.	**37E6.1**	180 ml	~~61,20~~	**42,75**
			37E6.2	1 l	~~87,65~~	**61,30**
			37E6.3	3 l	~~123,65~~	**86,50**
Fluid D	acc. to Ph. Eur./USP, ISO 11133, *ready-to-use*, sterile, for microbiology	Suitable for fat- and oil-containing samples as well as products with lipophilic components, where improved wetting and emulsification are required.	**37E7.1**	1 l	~~87,65~~	**61,30**
Fluid K	acc. to Ph. Eur./USP, ISO 11133, *ready-to-use*, sterile, for microbiology	Suitable for preserved or antimicrobial products where reliable neutralization of inhibitory substances and the recovery of microorganisms are required.	**37E8.1**	1 l	~~96,65~~	**67,60**

Safety information and additional data at www.carlroth.com

Dyes

-20 %

Carl ROTH offers a wide range of staining agents in a tried and tested quality – for use in botany, bacteriology, histology and cell culture.

Giemsa stain

for microscopy

Mixture of Azure and Eosin for preparing Giemsa solution.
It is used for staining blood and bone marrow smears.
Ingredient of the Giemsa stock solution (Art. No. T862).

Warning H319

Art. No.	Pack Qty.	Pack.	€	€
7691.1	5 g	glass	~~22,05~~	**17,60**
7691.2	25 g	glass	~~41,40~~	**33,10**
7691.3	100 g	glass	~~112,90~~	**90,30**

Eosin Y (C.I. 45380)

for microscopy

Eosin Y is a slightly acid fluorescent dye, which stains cytoplasm red. It is soluble in alcohol and water (usual concentrations: 0.5–2.0 %). Manifold use, e.g. for hematoxylin-eosin (H&E) staining, spore staining etc.

Excitation maximum: 534 nm
Emission maximum: 544 nm

Dissolve 0.5–2.0 % in water or ethanol.

Warning H317-H319

Art. No.	Pack Qty.	Pack.	€	€
7089.1	50 g	glass	~~50,00~~	**39,95**
7089.2	100 g	glass	~~87,65~~	**70,05**
7089.3	500 g	glass	~~284,90~~	**227,90**

Hematoxylin (C.I. 75290)

-30 %

for microscopy

For staining of cell nuclei.

A beige natural dye which achieves its active form, the hemalum, by oxidation (e.g. with sodium iodate) and treating with a metallic mordant (e.g. alum). Hemalum lakes stain cell nuclei blue.

Warning H319

Art. No.	Pack Qty.	Pack.	€	€
3816.1	10 g	glass	~~68,70~~	**48,05**
3816.3	50 g	glass	~~267,70~~	**187,35**
3816.2	100 g	glass	~~482,70~~	**337,85**

DAPI

-30 %

≥98 %, p.a.

For DNA-staining.

Fluorescent dye with specific DNA-binding capacity. For detection of mycoplasms in cell culture, for quantitative DNA measurement, and for chromosome counter staining. Store in the dark!

Working concentration

Nucleus staining in living cells: approx. 1 µg/ml in medium
Nucleus staining in fixed cells or fixed tissue sections: approx. 0.2 µg/ml in PBS, TBS or another incubation buffer
Detection of mycoplasms: 1 µg/ml in methanol
Excitation maximum: 359 nm
Emission maximum: 461 nm

Stock solution: 1 to 10 mg/ml in sterile water.
Store in the dark! Stabile for one year when solubilised, stored at –20 °C, and protected from light.

Storage temperature: –20 °C
Transport temperature: ambient temp.

Art. No.	Pack Qty.	Pack.	€	€
6335.1	25 mg	glass	~~123,65~~	**86,50**
6335.2	100 mg	glass	~~353,70~~	**247,55**

Nuclear fast red (C.I. 60760)

for microscopy

Nucleic acid dye, ingredient of the nuclear fast red aluminium sulphate solution (Art. No. N069).

Art. No.	Pack Qty.	Pack.	€	€
7728.1	1 g	glass	~~37,55~~	**29,95**
7728.2	5 g	glass	~~112,90~~	**90,30**
7728.3	10 g	glass	~~198,90~~	**159,10**

Acid fuchsin (C. I. 42685)

for microscopy

Used as plasma stain in 0.5-1.0 % aqueous solution

Danger H314

Art. No.	Pack Qty.	Pack.	€	€
T128.2	1 g	glass	~~24,20~~	**19,35**
T128.1	10 g	glass	~~55,40~~	**44,25**
T128.3	25 g	glass	~~84,40~~	**67,50**

Mounting Media

-20 %

The classical mounting media for producing durable sections in microscopy.
Carl ROTH offers **synthetic mounting media** like the proved ROTI®Histokitt and **natural balsams** like the classic Canada balsam.

ROTI®Histokitt

ready-to-use

ready-to-use, for histology

Synthetic mounting medium. Compatible with ROTI®Histol (Art. No. 6640).

- Quick drying
- Not suitable for aqueous samples!
- Refractive index: 1.4930-1.4960

Danger H225-H315-H336-H361d-H373

Art. No.	Pack Qty.	Pack.	€	€
6638.1	100 ml	glass	~~18,85~~	**15,05**
6638.2	500 ml	glass	~~50,00~~	**39,95**

ROTI®Histokitt II

ready-to-use

ready-to-use, for histology

Synthetic mounting medium. Compatible with xylene (e.g. Art. No. 9713).

- Quick drying
- Not suitable for aqueous samples!
- Adapted for embedding machines!
- Typical refractive index: 1.4930-1.4960

Warning H226-H312+H332-H315-H319-H335-H373-EUH208

Art. No.	Pack Qty.	Pack.	€	€
T160.1	100 ml	glass	~~17,75~~	**14,15**
T160.2	500 ml	glass	~~50,45~~	**40,30**

Euparal

ready-to-use

ready-to-use, for microscopy

- Alternative to Canada Balsam
- Embedding already from alcohol 80 %
- **Do not use organic solvents!**
- Refractive index for liquid Euparal: 1.483
- Refractive index for completely solidified Euparal: 1.535

Danger H226-H315-H317-H318-H371

Art. No.	Pack Qty.	Pack.	€	€
7356.1	100 g	glass	~~73,00~~	**58,35**
7356.2	500 g	glass	~~295,65~~	**236,50**

Euparal essence

ready-to-use

ready-to-use, for microscopy

Diluent and solvent for Euparal (Art. No. 7356).

Danger H226-H315-H318-H335-H371

Art. No.	Pack Qty.	Pack.	€	€
A145.1	100 ml	glass	~~61,20~~	**48,90**

Our new xylene- and toluene-free mounting medium – an alternative to ROTI®Mount

-25 %

ROTI®Mount Neo

NEW / + ready-to-use

ROTI®HistoGreen ready-to-use, for histology

Synthetic mounting medium. Compatible with ROTICLEAR® (Art. No. 230W).

- **Free from xylene and toluene**
- Not suitable for aqueous samples!
- Refractive index: 1.43 - 1.45
- Drying time: 2–4 h
  (allow to dry overnight for complete drying)

Danger H304-EUH066

Art. No.	Pack Qty.	Pack.	€	€
230U.1	500 ml	plastic	~~75,15~~	**56,30**