РЕАГЕНТЫ ДЛЯ ОЧИСТКИ БЕЛКА

Алматы (7273)495-231
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89
Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
Липецк (4742)52-20-81
Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37
Пермь (342)205-81-47
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Саранск (8342)22-96-24
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97
Тверь (4822)63-31-35
Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Улан-Удэ (3012)59-97-51
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

Россия +7(495)268-04-70
Казахстан +7(7172)727-132
Киргизия +996(312)96-26-47

https://millipore.nt-rt.ru || mailto:mer@nt-rt.ru

Product	Min. Qty.
71445 ProteoEnrich™ ATP Binders™ Resin	2 g
69670 His•Bind® Resin	1 L
70693 His•Bind Fractogel® Resin	0.5 L
71002 His•Mag™ Agarose Beads	0.2 L
69754 8X Binding Buffer	2 L
69756 8X Wash Buffer	2 L
69757 4X Elute Buffer	2 L
69759 8X Charge Buffer	2 L
189730 Streptavidin	100 mg
203188 Biotin-X-NHS	1 g

Protein Purification & Processing

Protein Purification

71445 ProteoEnrich™ ATP Binders™ Resin — Minimum Quantity: 2 g

- Isolate protein kinases and other proteins with ATP-binding pockets from crude cell or tissue lysates.
- Gentle elution conditions enable recovery of active proteins including interacting partners.
- ATP is immobilized via its γ-phosphate.

Resins and Buffers for His•Tag® Purification

The His•Bind® family of products offers a wide selection of supports designed for rapid one step purification of proteins containing the His•Tag sequence by immobilized metal affinity chromatography (IMAC). The His•Tag sequence (6, 8, or 10 consecutive histidine residues) binds to divalent cations (Ni^{2+}) immobilized on IDA-based His•Bind and His•Mag™ resins. After unbound proteins are washed away, the target protein is recovered by elution with either imidazole or slight reduction in pH. This versatile system enables proteins to be purified under gentle, nondenaturing conditions, or in the presence of either 6 M guanidine or urea.

69670 His•Bind® Resin — Minimum Quantity: 1 L

- Recommeded for small- to medium-scale gravity flow column or batch mode.
- Reusable many times and compatible with THP up to 1 mM.
- 45–65 µM particle size and recommended maximum pressure of 2.8 psi.

70693 His•Bind Fractogel® Resin — Minimum Quantity: 0.5 L

- Fractogel resins are suitable for small to production scale purification with FPLC or gravity flow columns.
- 40–90 µM particle size.
- Recommended maximum pressure of 267 psi

71002 His•Mag™ Agarose Beads — Minimum Quantity: 0.2 L

- His•Mag Agarose Beads for rapid, small-scale purification of multiple samples with minimum handling time using a magnetic format.
- 3 µm magnetic agarose beads.

69754 8X Binding Buffer — Minimum Quantity: 2 L

- Pretested buffer for use during His•Bind® purification binding step.

69756 8X Wash Buffer — Minimum Quantity: 2 L

- Pretested buffer for use during His•Bind® purification washing step.

69757 4X Elute Buffer — Minimum Quantity: 2 L

- Pretested buffer for use during His•Bind® purification elution step.

69759 8X Charge Buffer — Minimum Quantity: 2 L

- Pretested buffer for use during His•Bind® Resin charging step.

189730 Streptavidin — Minimum Quantity: 100 mg

- Streptavidin is a tool for universal test systems in immunology and molecular diagnostics. The streptavidin/biotin system is characterized by low non-specific interactions resulting in reduced background signals.
- Specific activity: 10 units/mg protein. One unit is defined as the amount of streptavidin required to bind 1.0 mg of D-Biotin.
- Lyophilized solid. Soluble in H_2O or many low ionic strength buffers at neutral pH. PROTECT FROM MOISTURE. CAS 9013-20-1, M.W. 60,000.

203188 Biotin-X-NHS — Minimum Quantity: 1 g

- Used to biotinylate amino acids, peptides, or proteins by reacting with primary amines under mild conditions.
- Inserts a six-atom spacer between biotin and the target ligand, thereby alleviating steric hindrance.
- Useful for red blood cell survival studies.
- Purity: ≥ 90%.
- White to off-white solid. PROTECT FROM MOISTURE. Soluble in DMSO. M.W. 454.5.

Tag Removal

69036 Factor Xa, Restriction Grade — Minimum Quantity: 8000 units

- Restriction Grade Factor Xa is qualified to specifically cleave target proteins at the C-terminal side of its recognition sequence (IleGluGlyArg↓) and can, therefore, be used for removing all vector-encoded sequences from appropriately designed constructs.
- Factor Xa is a highly purified enzyme isolated from bovine plasma and activated with Russell's viper venom.
- Purified to near homogeneity; shows no secondary cleavage from contaminating proteases.
- Functionally tested for activity with fusion proteins.
- Unit definition: one unit is defined as the amount of enzyme needed to cleave 50 µg Xa Cleavage Control Protein to > 95% completion in 16 hours at 21°C in a buffer containing 50 mM Tris-HCl,100 mM NaCl, and 5 mM $CaCl_2$, pH 8.0.

69671 Thrombin, Restriction Grade — Minimum Quantity: 1000 units

- Restriction Grade Thrombin is qualified to specifically cleave target proteins containing the recognition sequence LeuValProArg↓GlySer.
- Functionally tested for activity with fusion proteins and is free of detectable contaminating proteases.
- Unit definition: one unit is defined as the amount of enzyme needed to cleave 1 mg of fusion protein in 16 hours at 20°C in a 200-µl reaction containing buffer (20 mM Tris-HCl, 150 mM NaCl, 2.5 mM $CaCl_2$, pH 8.4), 50 µg fusion protein, and enzyme.

69672 Biotinylated Thrombin — Minimum Quantity: 1000 units

- Biotinylated Thrombin is similar to Restriction Grade Thrombin, but with a covalently attached biotin for easy removal of the enzyme from cleavage reactions using immobilized streptavidin.
- Unit definition: one unit is defined as the amount of enzyme needed to cleave 1 mg of fusion protein in 16 hours at 20°C in a 200-µl reaction containing buffer (20 mM Tris-HCl, 150 mM NaCl, 2.5 mM $CaCl_2$, pH 8.4), 50 µg fusion protein, and enzyme.

69066 Recombinant Enterokinase — Minimum Quantity: 1000 units

- Recombinant Enterokinase (rEK) is a highly purified preparation of the catalytic subunit of bovine enterokinase, which recognizes the identical cleavage site as the native enzyme (i.e., AspAspAspAspLys↓) and has similar enzymatic activity.
- rEK exhibits superior rates of cleavage of fusion proteins containing the recognition sequence when compared to the native enzyme.
- rEK cleaves target proteins at the C-terminal side of its recognition sequence and can, therefore, be used for removing all vector-encoded sequences from appropriately designed constructs.
- rEK is purified to near homogeneity and, unlike some preparations of native bovine enterokinase, exhibits no secondary cleavage arising from contaminating proteases.
- Functionally tested for activity with fusion proteins.
- Unit definition: one unit is defined as the amount of enzyme needed to cleave 50 µg of fusion protein in 16 hours at 23°C in a buffer containing 20 mM Tris-HCl, 50 mM NaCl, and 2 mM $CaCl_2$, pH 7.4.

71493 HRV 3C Protease — Minimum Quantity: 10,000 units

- Recombinant type 14 3C protease from human rhinovirus (HRV 3C) is a highly purifed 6X His-fusion protein which recognized the same cleavage site as the native enzyme: LeuGluValLeuPheGln↓GlyPro.
- The small, 22-kDa size of the protease, optimal activity at 4°C, high specificity, and N-terminal His•Tag® sequence make HFV 3C protease an ideal choice for rapid removal of purification, detection, and solubility enhancing fusion tags.
- pET vectors 47b-50b incorporate the HRV 3C protease cleavage site.
- Unit definition: one unit will cleave > 95% of 100 µg test His•Tag fusion protein in 50 mM Tris-HCl, 150 mM NaCl, pH 7.5 at 4°C for 16 h.

Protein Refolding

233155 Cleland's Reagent (DTT) — Minimum Quantity: 500 g

- Cyclizes as it reduces disulfides to thiols, so reaction is "driven" to completion.
- A protective agent for sulfhydryl (SH) groups.
- Blocks the lethal and hypnotic effects of pentobarbitol.
- Purity: ≥ 97% Heavy metals: < 1 ppm. Oxidized dithiothreitol: ≤ 0.5%.
- White solid. PACKAGED UNDER INERT GAS. Soluble in EtOH or H_2O. RTECS EK1610000, CAS 3483-12-3, M.W. 154.2.

3541 Glutathione, Reduced, Free Acid — Minimum Quantity: 1 kg

- A tripeptide that serves as a component of the γ-glutamyl amino acid transport system.
- An endogenous antioxidant that provides protection against autooxidation useful in protein refolding experiments.
- Purity: > 98%.
- White solid. HYGROSCOPIC. PACKAGED UNDER INERT GAS. Soluble in DMF, EtOH, or H_2O . RTECS MC0556000, CAS 70-18-8, $C_{10}H_{17}N_3O_6S$, M.W. 307.3.

Product	Min. Qty.
69036 Factor Xa, Restriction Grade	8000 units
69671 Thrombin, Restriction Grade	1000 units
69672 Biotinylated Thrombin	1000 units
69066 Recombinant Enterokinase	1000 units
71493 HRV 3C Protease	10,000 units
233155 Cleland's Reagent (DTT)	500 g
3541 Glutathione, Reduced, Free Acid	1 kg

Product	Min. Qty.
480001 NDSB-195	Inquire
480005 NDSB-201	Inquire
480013 NDSB-211	Inquire
480014 NDSB-221	Inquire
480010 NDSB-256	Inquire
407710 α-Iodoacetamide	1 kg
203325 BMS	50 g

NDSBs Non-Detergent SulfoBetaines

Non-detergent sulfobetaines (NDSBs) carry a sulfobetaine hydrophilic group and a short hydrophobic group that cannot aggregate to form micelles. Hence, NDSBs are not considered detergents. However, they have been successfully employed to increase the yields (up to 30%) of membrane, nuclear, and cytoskeletal-associated proteins. Presumably, the contribution from the short hydrophobic groups combined with the charge neutralization ability of the sulfobetaine group results in higher yields of membrane proteins. NDSBs have been used in refolding and renaturation of denatured proteins, including the proteins found in inclusion bodies in bacterial expression systems. It is hypothesized that the short hydrophobic group on sulfobetaines interacts with the hydrophobic regions of the protein to prevent aggregation during renaturation. Interestingly, NDSBs can substitute for higher concentrations of NaCl required during isolation of halophilic proteins. Other applications of NDSBs include capillary electrophoresis, isoelectrofocusing, and protein crystallization. NDSBs do not interfere with enzymatic assays involving chromogenic substrates bearing nitrophenyl groups and do not inhibit the activities of β-galactosidase and alkaline phosphatase.

Non-Detergent Sulfobetaines (NDSBs)		
Product	Cat. No.	M.W.
NDSB-195	480001	195.3
NDSB-201	480005	201.2
NDSB-211	480013	211.3
NDSB-221	480014	221.3
NDSB-256	480010	257.4

Protein Modification

407710 α-Iodoacetamide — Minimum Quantity: 1 kg

- An irreversible inhibitor of several cysteine proteases.
- Useful for alkylating cysteine and methionine residues.
- Purity: ≥ 99%.
- White crystalline powder. PROTECT FROM LIGHT. Soluble in DMF, EtOH, or H_2O. RTECS AC4200000, CAS 144-48-9, M.W. 185.0.

203325 BMS — Minimum Quantity: 50 g

- Water-soluble reagent useful for the reduction of native disulfide bonds in proteins.
- Purity: ≥ 99%.
- White solid. PACKAGED UNDER INERT GAS. Soluble in phosphatebuffer or H_2O. pKa 7.9 and 9.0. M.W. 186.3.

Алматы (7273)495-231
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89
Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
Липецк (4742)52-20-81
Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37
Пермь (342)205-81-47
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Саранск (8342)22-96-24
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97
Тверь (4822)63-31-35
Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Улан-Удэ (3012)59-97-51
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

Россия +7(495)268-04-70
Казахстан +7(7172)727-132
Киргизия +996(312)96-26-47

https://millipore.nt-rt.ru || mailto:mer@nt-rt.ru