Datasheet for ABIN491524

ToxinEraser Endotoxin Removal Kit

38 Publications

Go to Product page

Overview

Quantity:	1 kit
Application:	Affinity Chromatography (AC)

Product Details

Brand:	ToxinEraser™
Characteristics:	ToxinEraser is an endotoxin removal resin of high efficiency. It is based on the affinity matrix of modified polymyxin B (PMB), which allows highly efficient endotoxin removal. The final endotoxin level can be decreased to less than 0.1 EU/mL with repeat use of ToxinEraser endotoxin removal resin. • High stability and high removal efficiency • High binding capacity: > 2,000,000 EU/mL (CV) • Fast flow without any constant speed pump • Reusable up to five times if properly regenerated • Ready-to-use reagents and materials, such as equilibration buffer, collection tubes, etc. • Size: 1.5 mL in pre-packed column • Binding Capacity: Up to 2,000,000 EU/mL resin. • Ligand: Modified PMB (Polymixin B) • pH Stability: pH 5 -10 • Support Matrix: 4% cross-linked agarose, spherical beads • Mean Particle Size: 90 µm • Equilibration Buffer: Phosphate-Buffer, pH 8.0 • Types of substances that can be applied to the column: Protein, including peptides and antibody, polysaccharide etc. • Applicable Ionic Strength: 0.1 to 0.5 M NaCl • Substances tested that do not interfere with performance: 20% DMSO, 20% ethanol, 20%

Product Details

	glycerol, 1 M urea, 300 mM imidazole, 0.05% Tween 20, 10 mM DTT, etc.
Components:	• ToxinEraser Endotoxin Removal Resin: 1.5 mL pre-packed column • Regeneration Buffer: 125 mL • Equilibration Buffer: 125 mL • Collection Tubes: 1 pack (3 per pack) • Tips (1 mL): 2 packs (6 per pack) Equilibration buffer and regeneration buffer are separately available: ABIN769950, ABIN769949
Material not included:	Column stand 0.1 N sodium hydroxide or 0.1 N hydrochloric acid for adjusting the pH of the sample, and 3M NaCl for adjusting the ionic strength of the sample.

Target Details

Background:	Lipopolysaccharide (LPS) is a bacterial endotoxin, and a major constituent of the cell walls of gram-negative bacteria. During gram-negative bacteremia or endotoxemia, LPS is the principal pathophysiological mediator by which bacteria can cause hypotension, organ failure, disseminated intravascular coagulation, and fatal shock in mammalian hosts. The removal of these endotoxins is highly necessary for downstream processes but also highly difficult.

Application Details

Sample Preparation:	Sample Preparation. pH and ionic strength of the samples are the main factors that affect the performance of the resin. In general, a pH of 7- 8 is optimal, although the binding of LPS to the resin occurs from pH 6 to 9. Proper ionic strength can reduce the nonspecific binding or the loss of protein. 0.15 - 0.5 M NaCl is recommended for high-efficiency endotoxin removal and lower sample loss.
Restrictions:	For Research Use only

Handling

Handling Advice:	Do not freeze
Storage:	4 °C
Expiry Date:	18 months

Publications

Product cited in:

Ko, Lee, Lee, Hwang, Persson, Rockberg, Borrebaeck, Park, Kim, Uhlen, Lee: "Combination of novel HER2-targeting antibody 1E11 with trastuzumab shows synergistic antitumor activity in HER2-positive gastric cancer." in: **Molecular oncology**, Vol. 9, Issue 2, pp. 398-408, (2015) (PubMed).

Luo, Zhou, Xiao, Liang, Dai, Weng, Wu: "Interleukin-33 ameliorates ischemic brain injury in experimental stroke through promoting Th2 response and suppressing Th17 response." in: **Brain research**, Vol. 1597, pp. 86-94, (2015) (PubMed).

Gong, Wang, Xiong, Jiao, Yang, Wen et al.: "Enhanced protection against Rickettsia rickettsii infection in C3H/HeN mice by immunization with a combination of a recombinant adhesin rAdr2 and a protein fragment rOmpB-4 derived from outer ..." in: **Vaccine**, Vol. 33, Issue 8, pp. 985-92, (2015) (PubMed).

Bawadekar, De Andrea, Lo Cigno, Baldanzi, Caneparo, Graziani, Landolfo, Gariglio: "The Extracellular IFI16 Protein Propagates Inflammation in Endothelial Cells Via p38 MAPK and NF-?B p65 Activation." in: **Journal of interferon & cytokine research : the official journal of the International Society for Interferon and Cytokine Research**, Vol. 35, Issue 6, pp. 441-53, (2015) (PubMed).

Zhou, Wang, Deng, Zheng, Yuan, Chen, Bei, Li: "Evaluation of the protective efficacy of four novel identified membrane associated proteins of Streptococcus suis serotype 2." in: **Vaccine**, Vol. 33, Issue 19, pp. 2254-60, (2015) (PubMed).

There are more publications referencing this product on: Product page