

Product: Listeriolysin O, recombinant
Catalog #: 12-4422
Amount: 10 µg

DESCRIPTION: Recombinant Listeriolysin O (rLLO)
Listeriolysin O (LLO) is a single polypeptide protein secreted by the Gram-positive bacterium *Listeria monocytogenes*. LLO belongs to the group of cholesterol-binding sulfhydryl-activated toxins, the lytic activity of which is enhanced by reducing agents and is suppressed by exposure to oxygen or cholesterol.
LLO hemolytic activity is maximum at pH 5.5 and rapidly decreases with the increase of the pH.

SOURCE: *Escherichia coli*

PURITY: > 90%, as determined by:
(a) Analysis by RP-HPLC.
(b) Anion-exchange FPLC
(c) Analysis by reducing and non-reducing SDS-PAGE Silver Stained gel

ENDOTOXIN: Less than 0.1 ng/µg (IEU/µg) of LLO

DIMERS & AGGREGATES: Less than 1% as determined by silver stained SDS-PAGE gel analysis

PROTEIN CONTENT: Protein quantitation was carried out by 2 independent methods:
- UV spectroscopy at 280 nm
- Analysis by RP-HPLC

FORM: Purified, in 50mM NaH₂PO₄, 1mM EDTA, 2.7mM KCl, 1mM DTT, 5% glycerol and 0.5M NaCl.

APPLICATION: Cytosolic delivery of molecules, peptides, oligonucleotides and plasmid DNA
Production of specific monoclonal antibodies
Detection of anti- listeriolysin O antibodies

ACTIVITY: rLLO has a hemolytic activity 1.25x10⁶ HU/mg.
2mM DTT is used to reactivate the toxin.

STORAGE: -20°C (aliquot), avoid freezing and thawing cycles

BIOLOGICAL ACTIVITY: LLO is fully biologically active when compared to standards.
The potency per mg was tested and found to be 167IU/mg

REFERENCE:
Palmer, M. (2001) The family of thiol-activated, cholesterol-binding cytolysins. *Toxicon* 39, 1681-1689

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