

Recombinant Listeriolysin-O (LLO)

Certificate of Analysis and Data Sheet

➤ Source: E.Coli	➤ Catalog No. PRO-320
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➤ **Background :**

Recombinant 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 ^oactivated 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.

Listeriolysin O is purified by proprietary chromatographic techniques.

➤ **Physical Appearance:**

Sterile Filtered clear solution.

➤ **Formulation:**

The protein (0.2mg/ml) contains 50mM NaH₂PO₄, 1mM EDTA, 2.7mM KCl, 1mM DTT, 5% glycerol and 0.5M NaCl.

➤ **Stability:**

Recombinant Listeriolysin O although stable at room temperature for 1 week, should be stored desiccated below -18° C.

Please avoid freeze-thaw cycles.

➤ **Purity:**

Greater than 90.0% as determined by:

(a) Analysis by RP-HPLC.

(b) Anion-exchange FPLC.

(c) Analysis by reducing and non-reducing SDS-PAGE Silver Stained gel.

➤ **Dimers and aggregates:**

Less than 1% as determined by silver-stained SDS-PAGE gel analysis.

➤ **Biological Activity:**

Recombinant LLO has a hemolytic activity 1.25×10^6 HU/mg. 2mM DTT is used to reactivate the toxin.

➤ **Endotoxin:**

Less than 0.1 ng/ μ g (IEU/ μ g) of LLO.

➤ **Applications:**

- a. Cytosolic delivery of molecules, peptides, oligonucleotides and plasmid DNA.
- b. Production of specific monoclonal antibodies.
- c. Detection of anti-listeriolysin O antibodies.

➤ **Usage:**

This material is offered for research, laboratory or further evaluation purposes.