

## Recombinant E. coli LT-IIc, His-tagged

Cat. No. LT-912E    Lot. No. (See product label)

### SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
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| <b>Product Overview</b> | Type II heat-labile enterotoxin, LT-IIc, from Escherichia coli was produced recombinantly in E. coli and purified to homogeneity using a combination of nickel affinity and gel filtration chromatography. Protein has been His-tagged at the COOH ends of each of the five B subunits.                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Species</b>          | E.coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Source</b>           | E.coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Description</b>      | LT-IIc is a type II heat-labile enterotoxin produced by certain strains of Escherichia coli. LT-IIc binds to gangliosides GM1, GM2, GM3, and GD1a, but has no detectable binding activity for GD1b, GQ1b, and GT1b, three gangliosides which are avidly bound by LT-IIa, another type II heat-labile enterotoxin. LT-IIc binds to GM1, a ganglioside also bound by cholera toxin, a type I heat-labile enterotoxin, and by LT-IIa, but not by LT-IIb, the third member of the type II heat-labile enterotoxin family. The molecule induces high levels of cAMP in the cell upon intoxication. The enterotoxin is also a very strong mucosal and systemic adjuvant when administered by intranasal or intradermal routes. |
| <b>Form</b>             | Powder                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Molecular Mass</b>   | 80.36kDa, (A subunit + five B subunits)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Purity</b>           | > 95%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

 Tel: 1-631-559-9269    1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

|                |                                                                                                                    |
|----------------|--------------------------------------------------------------------------------------------------------------------|
| <b>Storage</b> | Store at -20 centigrade (long term). Store at +4 centigrade when dissolved in aqueous solution (pH 7.0 to pH 7.4). |
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| <b>Concentration</b> | 5mg/ml |
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| <b>Storage Buffer</b> | Water (pH 7.0 to 7.4) |
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## GENE INFORMATION

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| <b>Gene Name</b> | Heat-Labile Enterotoxin LT-lic |
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|------------------------|----|
| <b>Official Symbol</b> | LT |
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|-----------------|----------------------------------------------------------------------------|
| <b>Synonyms</b> | Type II heat-labile enterotoxin; Heat-Labile Enterotoxin; LT toxin; LT-lic |
|-----------------|----------------------------------------------------------------------------|

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