

# PRODUCT DATA SHEET



Bioworld Technology, Inc.

## Recombinant IL-15, His, Human

Catalog Number: BK0090-1mg

Source: Escherichia coli.

Quantity: 1mg

### Description:

Interleukin-15 (IL-15) is a cytokine with structural similarity to IL-2. Like IL-2, IL-15 binds to and signals through a complex composed of IL-2/IL-15 receptor beta chain (CD122) and the common gamma chain (gamma-C, CD132). IL-15 is secreted by mononuclear phagocytes (among other cells) following infection by virus. This cytokine induces cell proliferation of natural killer cells, which are cells of the innate immune system whose principal role is to kill virally infected cells. IL-15 can stimulate the proliferation of T-lymphocytes. Stimulation by IL-15 occurs following its interaction with IL-15R $\alpha$ . This interaction may enhance IL-15's interaction with IL-15R $\beta\gamma$ . Recombinant Human IL-15 (His-tag) produced in E.coli is a single non-glycosylated polypeptide chain containing 121 amino acids. A fully biologically active molecule, rhIL-15 (His-tag) has a molecular mass of 13.6 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

### Molecular Weight:

13.6 kDa, observed by reducing SDS-PAGE.

### Purity:

> 95% as analyzed by SDS-PAGE.

### Biological Activity:

ED<sub>50</sub> < 0.5 ng/ml, determined by the dose-dependent stimulation of the proliferation of CTLL-2 cells, corresponding to a specific activity of > 2 x 10<sup>6</sup> units/mg.

### Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

### Formulation:

Lyophilized after extensive dialysis against PBS.

### AA Sequence:

MHHHHHNWVNVISDLKKIEDLIQSMHIDAT-  
LYTESDVHPCKVTAMKCFLEL-  
QVISLESGDASIHDTVEN-  
LIILANNSLSSNGNVTEGCKECEEELEEKNI-  
KEFLQSFVHIVQMFINTS

### Endotoxin:

< 0.2 EU/ $\mu$ g, determined by LAL method.

### Reconstitution:

Reconstituted in ddH<sub>2</sub>O or PBS at 100  $\mu$ g/ml.

### Storage:

Lyophilized recombinant Human IL-15(His-tag) remains stable up to 6 months at -80 °C from date of receipt. Upon reconstitution, Human IL-15(His-tag) should be stable up to 1 week at 4 °C or up to 3 months at -20 °C.

### Usage:

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