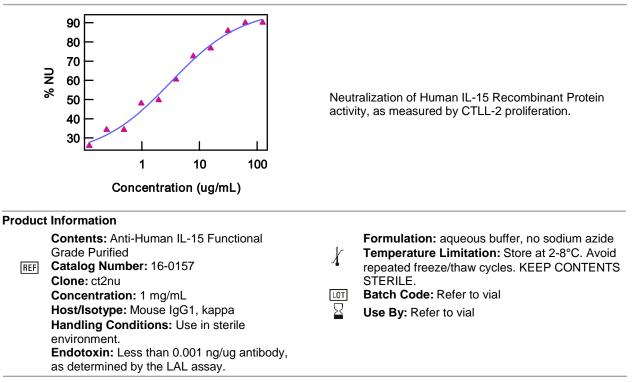


Anti-Human IL-15 Functional Grade Purified

Catalog Number: 16-0157

RUO: For Research Use Only. Not for use in diagnostic procedures.



Description

The ct2nu monoclonal antibody reacts with human IL-15 and neutralizes its bioactivity. IL-15, or IL-T, is a 14 kDa proinflammatory cytokine and member of the IL-2 family. It plays a role in the development and maturation of macrophages and dendritic cells, and is essential to the proliferation and survival of NK cells and CD8⁺ T cells.

IL-15 is expressed by antigen-presenting cells, epithelial cells, and stromal cells. IL-15 activates the Jak/STAT pathway through its heterotrimeric receptor. Two subunits of this receptor, the β and γ chains, are shared with the rest of the family, while the α subunit is unique to IL-15. In mice, the α chain is required to chaperone IL-15 from the ER to secretion. This chaperoning is not necessary in humans, and free IL-15 is detectable in human biological samples. However, the receptor-cytokine complex has been indentified in humans and demonstrates agonistic activity several-fold higher than IL-15 alone.

Applications Reported

The monoclonal antibody ct2nu reacts with and inhibits the bioactivity of human IL-15.

Applications Tested

The ND₅₀ of this antibody, as measured by inhibition of proliferation in CTLL-2 cells, is 1-10 ng/ml in the presence of 0.5 ng/ml recombinant human IL-15. Neutralization dose will vary based on cell type, cytokine concentration, and assay method. This antibody should be carefully titrated for optimal performance in the assay of interest.

References

Fehniger TA and Caligiuri MA. Interleukin 15: biology and relevance to human disease. Blood 2001 Jan 1: 97(1): 14-32.

Huntington ND, Legrand N, Alves NL, Jaron B, Weijer K, Plet A, Corcuff E, Mortier E, Jacques Y, Spits H, Di Santo



Anti-Human IL-15 Functional Grade Purified

Catalog Number: 16-0157 RUO: For Research Use Only. Not for use in diagnostic procedures.

JP. IL-15 trans-presentation promotes human NK cell development and differentiation in vivo. J Exp Med. 2009 Jan 16; 206(1): 25-34.

Rowley J, Archana M, Chien-Fu H, Wu TC. Inhibition of tumor growth by NK1.1+ and CD8+ T cells activated by IL-15 through receptor betagamma signaling in trans. J Immunol. 2008; 181: 8237-47.

Related Products

11-7159 Anti-Human IL-15 Receptor FITC (eBioJM7A4) 12-7159 Anti-Human IL-15 Receptor PE (eBioJM7A4) 14-7159 Anti-Human IL-15 Receptor Purified (eBioJM7A4) 14-8159 Human IL-15 Recombinant Protein 34-8159 Human IL-15 Recombinant Protein Carrier-Free 88-7158 Human IL-15 ELISA Ready-SET-Go!®