

Human IL-15 Antibody

Purified No Carrier Protein

Monoclonal Antibody

Product Information

Product No.: I-639
Clone: 34593
RRID: AB_2830761
Isotype: Mouse IgG1
Storage: -20°C to -70°C

Product Description

Specificity:

Mouse Anti-Human Interleukin 15 (IL-15) (Clone 34593) recognizes an epitope on Human IL-15. This monoclonal antibody was purified using multi-step affinity chromatography methods such as Protein A or G depending on the species and isotype. This antibody shows no cross-reactivity with rhIL-2.

Background:

Interleukin 15 (IL-15) is a novel cytokine that uses beta- and gamma-chain of IL-2R for signal transduction and is structurally similar to IL-2. IL-15 is secreted by activated monocytes/macrophages following infection by virus.¹ This cytokine induces cell proliferation of natural killer cells. This cytokine and interleukin 2 share many biological activities. They are found to bind common hematopoietin receptor subunits, and may compete for the same receptor, and thus negatively regulate each other's activity. This cytokine induces the activation of JAK kinases, as well as the phosphorylation and activation of transcription activators STAT3, STAT5, and STAT6. IL-15 can recruit and activate T lymphocytes in the synovial membrane, thereby contributing to Rheumatoid arthritis pathogenesis.²

Known Reactivity Species:

Human

Format:

Purified No Carrier Protein

Immunogen:

Purified Recombinant Human IL-15 (Accession # P40933)

Formulation

This monoclonal antibody has been 0.2 µm filtered and lyophilized from modified Dulbecco's phosphate buffered saline (1X PBS) pH 7.2 - 7.4 containing 5.0% w/v trehalose with no calcium, magnesium or preservatives present.

Endotoxin

<0.1 EU/µg as determined by the LAL method

Storage and Stability

The lyophilized antibody can be stored desiccated at -20°C to -70°C for up to twelve months. The reconstituted antibody can be stored for at least four weeks at 2-8°C. For long-term storage of the reconstituted antibody, aseptically aliquot into working volumes and store at -20°C to -70°C **in a manual defrost freezer. Avoid repeated freeze thaw cycles.** No detectable loss of activity was observed after six months.

Applications

Applications and Recommended Usage (Quality Tested By Leinco):

Western Blotting: To detect Human IL-15 this monoclonal antibody can be used at a concentration of 1-2 µg/ml. This monoclonal antibody should be used in conjunction with compatible second-step reagents such as PN:M114 and a chromogenic substrate such as PN:T343. The detection limit for Human IL-15 is 5 ng/lane under either reducing or non-reducing conditions. The sensitivity of detection may increase up to 50 fold when a chemiluminescent substrate is used. A suitable Western blotting control is PN:I-196.

Other Applications Reported in Literature:

Neutralization: This antibody is useful for neutralization of Human IL-15 bioactivity. The antibody dose required to neutralize 50% (ND₅₀) of the biological activity of Human IL-15 (at 10 ng/ml) is 0.05-0.1 µg/ml.

Country of Origin

USA

References

1. Yoshikai, Y. *et al.* (1996) *J. Immunol.* **156**: 663
2. Liew, FY. *et al.* (1996) *Nat. Med.* **4**: 643