Active Recombinant Bovine Interleukin 13

Cat. No. IL13-234B **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Bovine IL-13 was expressed inYeast. MW= 12.6 kDa (112 aa).
Species	Bovine
Source	Yeast
Description	IL13 is an immunoregulatory cytokine produced primarily by activated Th2 cells. IL-13 is involved in several stages of B-cell maturation and differentiation. It up-regulates CD23 and MHC class II expression, and promotes IgE isotype switching of B cells. This cytokine down-regulates macrophage activity, thereby inhibits the production of pro-inflammatory cytokines and chemokines. This cytokine is found to be critical to the pathogenesis of allergen-induced asthma but operates through mechanisms independent of IgE and eosinophils. This gene, IL3, IL5, IL4, and CSF2 form a cytokine gene cluster on chromosome 5q, with this gene particularly close to IL4.
Formulation/ Reconstitution	Lyophilized. Reconstitute with sterile phosphate-buffered saline containing at least 0.1% carrier protein.
Purification	Ion-exchange chromatography.
Purity	>95% as visualized by SDS-PAGE analysis.
Amino Acid Sequence	SPVPSATALK ELIEELVNIT QNQKVPLCNG SMVWSLNLTS SMYCAALDSL ISISNCSVIQ RTKRMLNALC PHKPSAKQVS SEYVRDTKIE VAQFLKDLLR HSRIVFRNER FN.

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Bioactivity	The biological activity of recombinant bovine IL-13 was measured in a cell proliferation assay using the human TF-1 cell line. The ED50 for this effect is typically 20 - 30 ng/mL.
Stability And Storage	Stable for up to twelve months from date of receipt at -20°C. Stable for at least 3 months when stored in working aliquots with a carrier protein at -20°C. Avoid repeated freeze/thaw cycles.

GENE INFORMATION

Gene Name	IL13 interleukin 13 [Bos taurus]
Synonyms	interleukin 13; IL13; interleukin-13; IL-13
Gene ID	281247
mRNA Refseq	NM_174089.1
Protein Refseq	NP_776514.1
UniProt ID	Q9XSV9
Chromosome Location	7
Pathway	Asthma; Cytokine-cytokine receptor interaction; Fc epsilon RI signaling pathway; Jak-STAT signaling pathway
Function	cytokine activity; interleukin-13 receptor binding; protein binding

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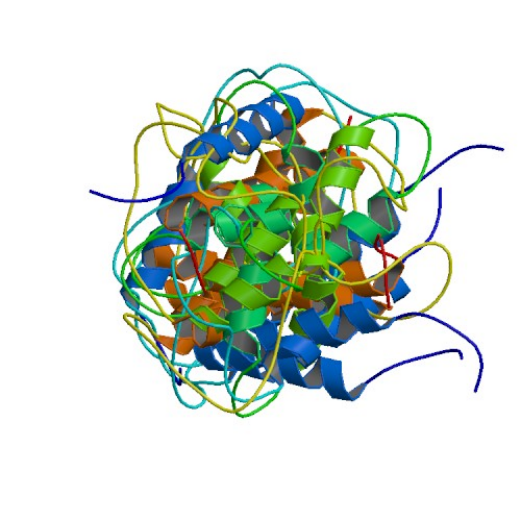
PDB rendering based on 1ga3.	

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