



# Recombinant Protein Technical Manual

## Recombinant Mouse IL13RA2/CD213A2 Protein (His & Fc Tag)(Active)

RPES4513

### Product Data:

**Product SKU:** RPES4513

**Size:** 100µg

**Species:** Mouse

**Expression host:** HEK293 Cells

**Uniprot:** NP\_032382.1

### Protein Information:

**Molecular Mass:** 64.5 kDa

**AP Molecular Mass:** 75-80 kDa

**Tag:** C-His-Fc

**Bio-activity:** 1. Immobilized human IL13 at 20 µg/ml (100 µl/well) can bind mouse IL13RA2 with a linear ranger of 0.5-2 µg/ml. 2. Measured by its ability to inhibit IL13-dependent proliferation of TF1 human erythroleukemic cells. The ED50 for this effect is typically 5-3

**Purity:** > 85 % as determined by SDS-PAGE

**Endotoxin:** < 1.0 EU per µg of the protein as determined by the LAL method.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from sterile PBS, pH 7.4

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:** Functional ELISA

**Synonyms:** CD213a2

## Immunogen Information:

**Sequence:** Met 1-Lys 334

## Background:

Interleukin3 receptor subunit alpha-2 (IL13RA2/IL3RA2) is also known as also known as cluster of differentiation 213A2 (CD213A2), IL3 receptor subunit alpha-2, IL3R subunit alpha-2, and IL3RA2. The IL13RA2 is often overexpressed in brain tumors, making Il13ra2 one of the vaccine targets for immunotherapy of glioma. IL13RA2/IL3RA2 is a cancer-associated receptor that is present in greater than 80% of High Grade Astrocytomas (HGA) and has recently been recognized as a cytokine that predisposes breast cancer cells to metastasize. Expression of IL13R $\alpha$ 2 was rapidly lost from the surface of transduced cells grown in culture. The loss appeared to be related to ligands present in fetal bovine serum in the medium. None of the malignant glioma cell lines cultivated in vitro and tested to date exhibited the IL13R $\alpha$ 2 receptor. A recombinant virus (R5111) enters cells via its interaction with the IL13R $\alpha$ 2 receptor in a manner that cannot be differentiated from the interaction of wild-type virus with its receptors.