

IL-13RA2 Protein, Rat, Recombinant (hFc)

General Information

Synonyms:	interleukin 13 receptor, alpha 2; interleukin 13 receptor, α 2
Protein Construction:	Leu24-Lys336
Species:	Rat
Expression Host:	HEK293 Cells
Accession:	Q8VHK6
Molecular Weight:	63.17 kDa (Predicted); 70-80 kDa (Due to glycosylation)

QC Testing

Biological Activity:	Immobilized Human IL-13, His Tag at 1 μ g/ml (100 μ l/well) on the plate. Dose response curve for Rat IL-13Ra2, hFc Tag with the EC50 of 10.7 ng/ml determined by ELISA (QC Test). Rat IL-13Ra2, hFc Tag captured on CM5 Chip via Protein A can bind Human IL-13, His Tag with an affinity constant of 93.96 pM as determined in SPR assay (Biacore T200).
Purity:	> 95% as determined by Tris-Bis PAGE; > 95% as determined by HPLC
Endotoxin:	< 1.0 EU/ μ g of the protein as determined by the LAL method.
Formulation:	Lyophilized from 0.22 μ m filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in distilled water. The product concentration should not be less than 100 μ g/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

Two type 1 membrane proteins belonging to the hemopoietin receptor family have been cloned and shown to bind IL-13 with differing affinities. The lower affinity IL-13 binding protein, previously designated IL-13 R alpha, IL-13 R alpha ' or NR4, is now referred to as IL-13 R alpha 1. The high-affinity IL-13 binding protein, previously also

designated IL-13 R or IL-13 R alpha ' , is now referred to as IL-13 R alpha 2.

Reference

Zhou G,et al.. (2005) Characterization of a recombinant herpes simplex virus 1 designed to enter cells via the IL13Ralpha2 receptor of malignant glioma cells. J Virol. 79(9): 5272-7.

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Nair BG,et al.. (2011) Nanotechnology platforms; an innovative approach to brain tumor therapy. Med Chem. 7(5): 488-503.

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