Recombinant Mouse IL-13 (110AA, C-6His)

Catalog No.: RP0086

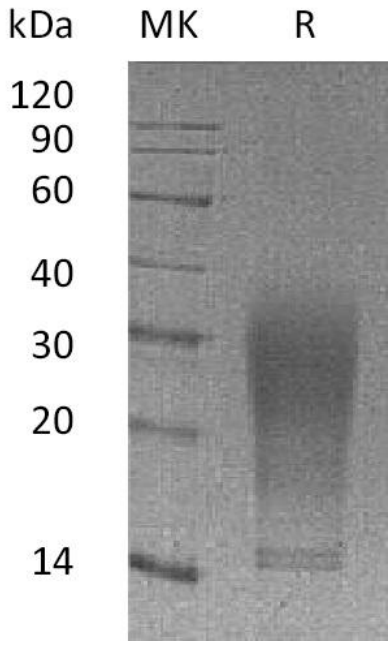
Basic Information

Information	
Source	*Human Cells*
Description	Recombinant Mouse Interleukin-13 is produced by our Mammalian expression system and the target gene encoding Pro22-Phe131 is expressed with a 6His tag at the C-terminus.
Accession	P20109
Known As	Interleukin-13; IL-13; T-Cell Activation Protein P600; Il13; Il-13
Predicted Mol Mass	13.1 KDa
Apparent Mol Mass	14-30 KDa, reducing conditions

Properties	
Formulation	Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4.
Storage	Lyophilized protein should be stored at ≤ -20°C, stable for one year after receipt. Reconstituted protein solution can be stored at 2-8°C for 2-7 days. Aliquots of reconstituted samples are stable at ≤ -20°C for 3 months.
Endotoxin	< 1 EU/μg as determined by LAL test.
Reconstitution	Always centrifuge tubes before opening.Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100μg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.

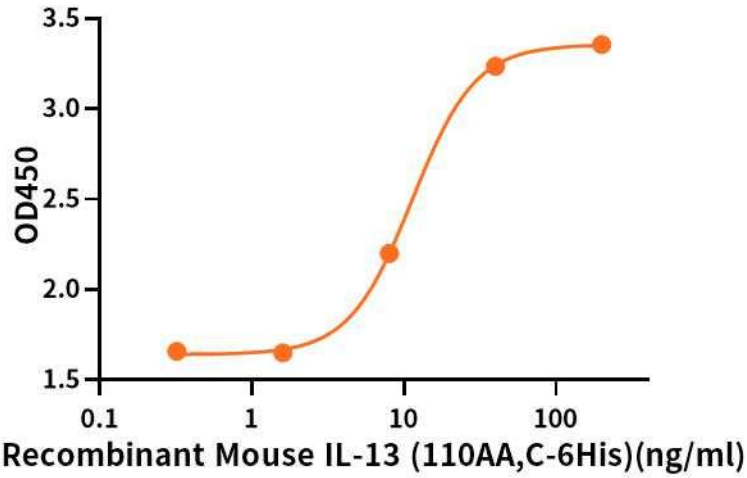
Experimental Data

Purity-SDS-PAGE



Greater than 95% as determined by reducing SDS-PAGE. (QC verified)

Bioactivity-Cell Based Assay



Measured in a cell proliferation assay using TF-1 human erythroleukemic cells. The ED50 for this effect is 11.34 ng/ml. (Regularly tested)

Background

Mouse interleukin 13 (mIL-13) is a pleiotropic cytokine produced by activated Th2 cells. IL-13 induces B cell proliferation and immunoglobin production. It contains a four helical bundle with two internal disulfide bonds. Mouse IL13 shares 58% sequence identity with human protein and exhibits cross-species activity. IL13 signals via receptor IL13R (type2, IL4R) and activates STAT-6. IL13 initially binds IL-13Rα1 with low affinity and triggers association of IL4Rα, generating a high affinity heterodimeric receptor IL13R and eliciting downstream signals. IL13 also binds IL-13Rα2 with high affinity, which plays a role in a negative feedback system of IL13 signaling. IL13 is an important mediator of allergic inflammation and disease.