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Product datasheet for TP727086

II5ra Mouse Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant Mouse Interleukin-5 Receptor Subunit Alpha/IL-5 Rα (C-6His)
Species:	Mouse
Expression cDNA Clone or AA Sequence:	Asp18-His339
Tag:	C-His
Buffer:	Lyophilized from a 0.2 um filtered solution of PBS, 5% Trehalose, pH 7.4.
Note:	Recombinant Mouse Interleukin-5 Receptor Subunit Alpha is produced by our Mammalian expression system and the target gene encoding Asp18-His339 is expressed with a 6His tag at the C-terminus.
Storage:	Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Stability:	12 months from date of despatch
Locus ID:	16192
UniProt ID:	<u>P21183</u>
Synonyms:	Interleukin-5 receptor subunit alpha; IL-5 receptor subunit alpha; IL-5R subunit alpha; IL-5R- alpha; IL-5RA; CD125; Il5ra; Il5r
Summary:	Interleukin 5 Receptor alpha (IL-5 Rα), also known as CD125, is a hematopoietin receptor that plays a dominant role in eosinophil biology. Mature mouse IL-5 Rα consists of a 322 amino acid (aa) extracellular domain (ECD) with a WSxWS motif and a four cysteine motif, a 22 aa transmembrane segment, and a 54 aa cytoplasmic domain. The high affinity receptor for IL-5 is a complex that consists of the ligand binding IL-5 Rα and the transmembrane common \hat{I}^2 chain ($\hat{I}^2c/CD131$) which is shared with the receptor complexes for IL-3 and GM-CSF. IL-5 Rα binds IL-5 at low affinity and then associates with preformed \hat{I}^2c oligomers to form the signaling-competent receptor complex. IL-5 stimulation of CD34+ hematopoietic progenitor cells induces the up-regulation of transmembrane IL-5 Rα followed by eosinophilic differentiation and activation. IL-5 Rα also promotes the differentiation of basophils and B cells. Exposure of mature eosinophils to IL-5 attenuates their IL-5 responsiveness by inducing the down-regulation of surface IL-5 Rα and increased production of soluble IL-5 Rα.



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