

IL-3R alpha/CD123 Protein, Mouse (315a.a, HEK293, His)

Cat. No.:	HY-P72542
Synonyms:	Interleukin-3 receptor subunit alpha; IL-3R-alpha; IL-3RA; CD123; Sut-1
Species:	Mouse
Source:	HEK293
Accession:	P26952 (S17-K331)
Gene ID:	16188
Molecular Weight:	50-65 kDa

PROPERTIES

AA Sequence	<p> S D L A A V R E A P P T A V T T P I Q N L H I D P A H Y T L S W D P A P G A D I T T G A F C R K G R D I F V W A D P G L A R C S F Q S L S L C H V T N F T V F L G K D R A V A G S I Q F P P D D D G D H E A A A Q D L R C W V H E G Q L S C Q W E R G P K A T G D V H Y R M F W R D V R L G P A H N R E C P H Y H S L D V N T A G P A P H G G H E G C T L D L D T V L G S T P N S P D L V P Q V T I T V N G S G R A G P V P C M D N T V D L Q R A E V L A P P T L T V E C N G S E A H A R W V A R N R F H H G L L G Y T L Q V N Q S S R S E P Q E Y N V S I P H F W V P N A G A I S F R V K S R S E V Y P R K L S S W S E A W G L V C P P E V M P V K </p>
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH ₂ O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	The IL-3R alpha/CD123 protein functions as a cell surface receptor for IL3 and is expressed on hematopoietic progenitor cells, monocytes, and B-lymphocytes, governing the production and differentiation of hematopoietic progenitor cells into lineage-restricted cells. Upon ligand stimulation, IL-3R alpha rapidly undergoes heterodimerization with IL3RB, leading to the phosphorylation and activation of effector proteins such as JAK2 and PI3K. These activated proteins play a crucial role in
------------	--

signaling cell proliferation and differentiation. The activation of JAK2, in particular, initiates a STAT5-mediated transcriptional program. IL-3R alpha interacts with IL3 and forms a heterodimer with an alpha and a beta subunit, with the beta subunit being common to the IL3, IL5, and GM-CSF receptors. These interactions highlight the intricate molecular mechanisms through which IL-3R alpha regulates signaling pathways, contributing to the modulation of hematopoietic cell development and function.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA