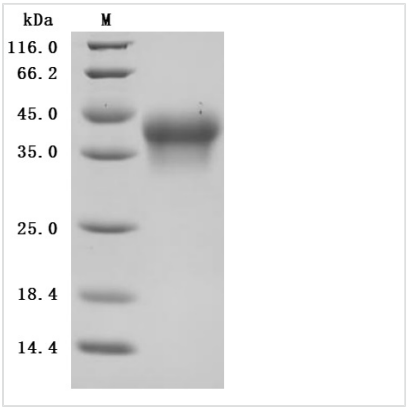
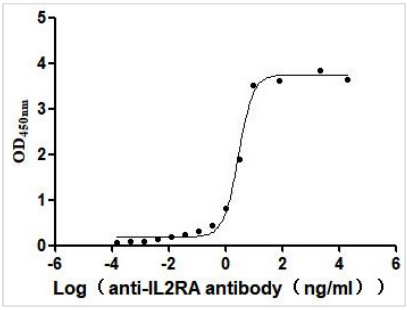
Recombinant Human Interleukin-2 receptor subunit alpha (IL2RA), partial (Active)

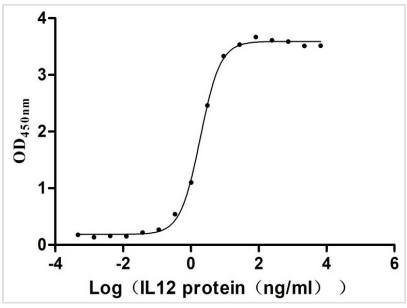
Product Code	CSB-MP011649HU3
Abbreviation	Recombinant Human IL2RA protein, partial (Active)
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P01589
Form	Lyophilized powder
Storage Buffer	Lyophilized from a 0.2 μm filtered 20 mM Tris-HCl, 0.5 M NaCl, 6% Trehalose, pH 8.0
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Biological Activity	①Measured by its binding ability in a functional ELISA. Immobilized Human IL2RA at 2 μg/mL can bind Anti-IL2RA recombinant antibody (CSB-RA011649MA1HU) , the EC50 is 2.463-3.353 ng/mL.②Measured by its binding ability in a functional ELISA. Immobilized Human IL2RA at 2 μg/mL can bind Human IL2(CSB-MP011629HU) , the EC50 is 1.693-2.039 ng/mL.
Purity	Greater than 95% as determined by SDS-PAGE.
Sequence	ELCDDDPPEIPHATFKAMAYKEGTMLNCECKRGFRRIKSGSLYMLCTGNSSHSSWDNQCQCTSSATRNTTKQVTPQPEEQKERKTTEMQSPMQPVDQASLPGHCREPPPWENEATERIYHFVVGQMVYYQCVQGYRALHRGPAESVCKMTHGKTRWTQPQLICTGEMETSQFPGEEKPQASPEGRPESETSC
Source	Mammalian cell
Target Names	IL2RA
Expression Region	22-213aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4? for up to one week.
Tag Info	C-terminal 10xHis-tagged
Mol. Weight	23.6 kDa
Protein Length	Partial
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.



Activity
Measured by its binding ability in a functional ELISA. Immobilized Human IL2RA at 2μg/mL can bind Anti-IL2RA recombinant antibody (CSB-RA011649MA1HU)?the EC_{50} is 2.463-3.353 ng/mL.



Activity
Measured by its binding ability in a functional ELISA. Immobilized Human IL2RA at 2μg/mL can bind Human IL2(CSB-MP011629HU)?the EC_{50} is 1.693-2.039 ng/mL.

Description

The recombinant human interleukin-2 receptor subunit alpha (IL2RA) is generated in the mammalian cell expression system. The gene encoding the human IL2RA protein (22-213aa) is inserted into a plasmid vector, along with a C-terminal 10xHis-tag gene. This recombinant vector is transfected into mammalian cells. The transfected cells are cultured under controlled conditions that promote protein expression. The recombinant human IL2RA protein is harvested from the cell culture media. Its purity was measured to be greater than 95% using SDS-PAGE. The endotoxin content of this protein was determined to be less than 1.0 EU/ug using the LAL method. It reacted with both IL2RA recombinant antibody (CSB-RA011649MA1HU) and human IL2 (CSB-MP011629HU), demonstrating its bioactivity.

IL2RA, a specific component of the high-affinity IL2R, is primarily expressed on the surface of activated T cells, B cells, subsets of thymic cells, pre-B cells, and Treg cells. IL2RA exhibits high expression on the surface of various hematological tumor cells and is associated with tumor prognosis. Moreover, the elevated expression of IL2RA on activated circulating immune cells and Treg cells has been utilized in IL-2 immunotherapy for treating tumors and autoimmune diseases. Currently, the administration of anti-IL2RA

	radioimmunoconjugates and immunotoxins has been established as relatively clinically safe and effective in various hematological tumor indications. Additionally, novel antibody-drug conjugates (ADCs) targeting IL2RA are actively undergoing clinical trials. Developing mammalian IL2RA protein with high activity holds significant importance in facilitating research on IL2RA-related drugs.
Endotoxin	Less than 1.0 EU/ug as determined by LAL method.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20?/-80?. Our default final concentration of glycerol is 50%. Customers could use it as reference.
Shelf Life	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.