

Product datasheet

Recombinant human IL-2 Receptor alpha protein (Active) ab221397

[5 Images](#)

Description

| | | |
|--|---|--|
| Product name | Recombinant human IL-2 Receptor alpha protein (Active) | |
| Biological activity | Measured by its binding ability in a functional ELISA. Immobilized Human IL-2, Tag Free at 5 µg/mL (100 µL/well) can bind ab221397 with a linear range of 0.01-1.11 µg/mL. | |
| Purity | > 95 % SDS-PAGE. | |
| Endotoxin level | < 1.000 Eu/µg | |
| Expression system | HEK 293 cells | |
| Accession | P01589 | |
| Protein length | Protein fragment | |
| Animal free | No | |
| Nature | Recombinant | |
| Species | Human | |
| Sequence | ELCDDDPPEIPHATFKAMAYKEGTM LNCECKRGFRRIKSG SLYMLCTGNS SHSSWDNQCQCTSSATRNTTKQVTPQP EEQKERKTTEM QSPMQPVDQASL PGHCREPPPWENEATERIYHFVVGQMVYYQCVQGYRALH RGP AESVCKMT HGKTRWTQPQLICTGEMETSQFPGEEKPQASPEGRPESE TSC | |
| Predicted molecular weight | 24 kDa including tags | |
| Amino acids | 22 to 213 | |
| Tags | His tag C-Terminus | |
| Additional sequence information | (NP_000408). | |

Specifications

Our [Abpromise guarantee](#) covers the use of **ab221397** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications Functional Studies

SDS-PAGE

Form Lyophilized

Additional notes This product is stable after storage at:
-20 °C to -70 °C for 12 months in lyophilized state;
-70 °C for 3 months under sterile conditions after reconstitution.

Preparation and Storage

Stability and Storage Shipped at 4°C. Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
pH: 7.40
Constituents: 95% PBS, 5% Trehalose
This product is an active protein and may elicit a biological response in vivo, handle with caution.

Reconstitution Reconstitute with sterile deionized water to a concentration of 400 µg/ml.

General Info

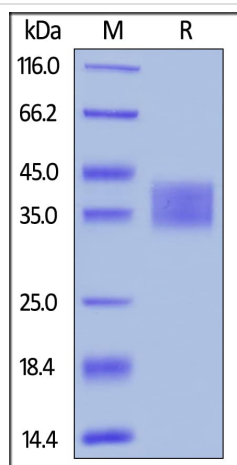
Function Receptor for interleukin-2.

Involvement in disease Genetic variations in IL2RA are associated with susceptibility to diabetes mellitus insulin-dependent type 10 (IDDM10) [MIM:601942]. A multifactorial disorder of glucose homeostasis that is characterized by susceptibility to ketoacidosis in the absence of insulin therapy. Clinical features are polydipsia, polyphagia and polyuria which result from hyperglycemia-induced osmotic diuresis and secondary thirst. These derangements result in long-term complications that affect the eyes, kidneys, nerves, and blood vessels.

Sequence similarities Contains 2 Sushi (CCP/SCR) domains.

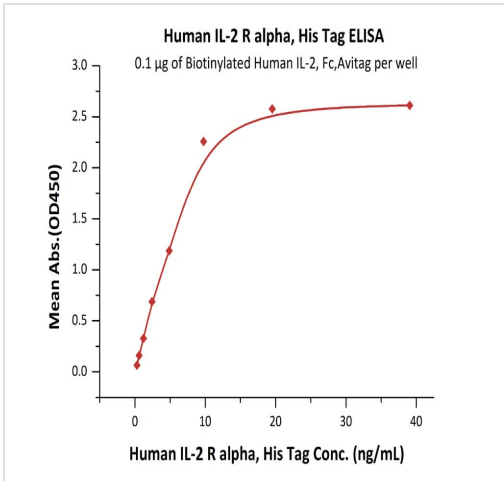
Cellular localization Membrane.

Images



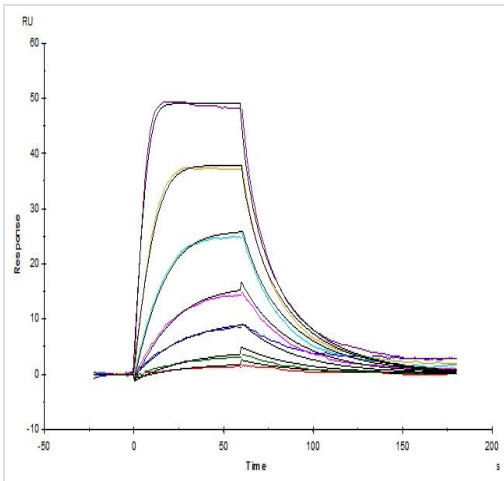
SDS-PAGE of reduced ab221397 stained overnight with Coomassie Blue. The protein migrates as 34-46 kDa under reducing conditions due to glycosylation.

SDS-PAGE - Recombinant human IL-2 Receptor alpha protein (Active) (ab221397)



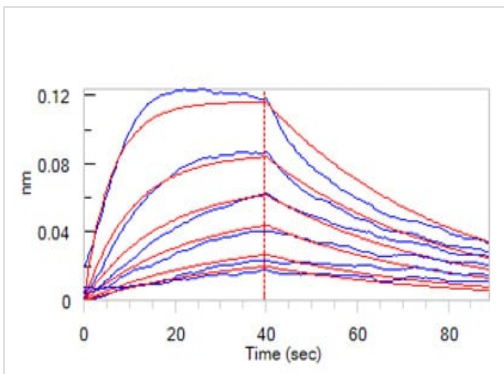
Functional Studies - Recombinant human IL-2 Receptor alpha protein (Active) (ab221397)

Immobilized Biotinylated Human IL-2, Fc,Avitag at 1 µg/mL (100 µL/well) on streptavidin precoated (0.2 µg/well) plate, can bind ab221397 with a linear range of 1-39 ng/mL.



Functional Studies - Recombinant human IL-2 Receptor alpha protein (Active) (ab221397)

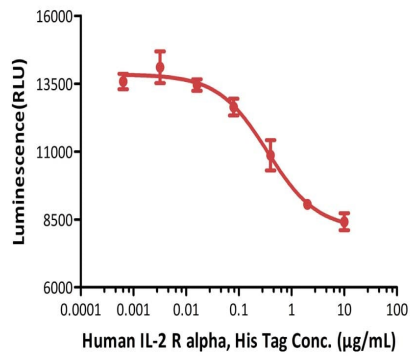
Ab221397 captured on CM5 chip via anti-His antibody, can bind Human IL-2, Tag Free with an affinity constant of 29.9 nM as determined in a SPR assay (Biacore T200).



Functional Studies - Recombinant human IL-2 Receptor alpha protein (Active) (ab221397)

Loaded ab221397 on HIS1K Biosensor, can bind Human IL-2, Tag Free with an affinity constant of 18 nM as determined in BLI assay (ForteBio Octet Red96e).

Human IL-2 R alpha, His Tag inhibits the IL-2-dependent proliferation of Mo7e cells



Functional Studies - Recombinant human IL-2
Receptor alpha protein (Active) (ab221397)

Ab221397 inhibits the IL-2 dependent proliferation of Mo7e cells.
The EC50 for this effect is 0.35-0.77 µg/mL.

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