

Datasheet for ABIN1672737

CD25 ELISA Kit



[Go to Product page](#)

1 Image

Overview

Quantity:	96 tests
Target:	CD25 (IL2RA)
Binding Specificity:	AA 22-213
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	78-5000 pg/mL
Minimum Detection Limit:	78 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human CD25/IL-2sR alpha
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: NSO Immunogen sequence: E22-C213
Specificity:	Expression system for standard: NSO,E22-C213
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.
Sensitivity:	<5pg/mL

Product Details

Material not included:	Microplate reader in standard size. Automated plate washer. Adjustable pipettes and pipette tips. Multichannel pipettes are recommended in the condition of large amount of samples in the detection. Clean tubes and Eppendorf tubes. Washing buffer (neutral PBS or TBS). Preparation of 0.01M TBS: Add 1.2g Tris, 8.5g NaCl
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Target Details

Target:	CD25 (IL2RA)
Alternative Name:	IL2RA (IL2RA Products)
Background:	<p>Protein Function: Receptor for interleukin-2.</p> <p>Background: CD25 is the alpha chain of the IL-2 receptor. It is a type I transmembrane protein present on activated T cells, activated B cells, some thymocytes, myeloid precursors, and oligodendrocytes that associates with CD122 to form a heterodimer that can act as a high-affinity receptor for IL-2. The IL2R gene was mapped to 10p15-p14. CD25 is expressed in most B-cell neoplasms, some acute nonlymphocytic leukemias, neuroblastomas, and tumor infiltrating lymphocytes. Its soluble form, called sIL-2R may be elevated in these diseases and is occasionally used to track disease progression.</p> <p>Synonyms: Interleukin-2 receptor subunit alpha,IL-2 receptor subunit alpha,IL-2-RA,IL-2R subunit alpha,IL2-RA,TAC antigen,p55,CD25,IL2RA,</p> <p>Full Gene Name: Interleukin-2 receptor subunit alpha</p> <p>Cellular Localisation: Membrane, Single-pass type I membrane protein.</p>
Gene ID:	3559
UniProt:	P01589
Pathways:	JAK-STAT Signaling , Growth Factor Binding , Activated T Cell Proliferation

Application Details

Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well assay was recommended for both standard and sample testing.
Comment:	Sequence similarities: Contains 2 Sushi (CCP/SCR) domains.
Plate:	Pre-coated
Protocol:	human CD25 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for CD25 has been precoated onto 96-well plates. Standards (NS0,E22-C213) and test samples are added to the wells, a

Application Details

biotinylated detection polyclonal antibody from goat specific for CD25 is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with PBS or TBS buffer. HRP substrate TMB was used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the human CD25 amount of sample captured in plate.

Assay Procedure: Aliquot 0.1 mL per well of 5000pg/mL, 2500pg/mL, 1250pg/mL, 625pg/mL, 313pg/mL, 156pg/mL, 78pg/mL human CD25 standard solutions into the pre-coated 96-well plate. Add 0.1 mL of the sample diluent buffer into the control well (Zero well). Add 0.1 mL of each properly diluted sample of human cell culture supernates, serum or plasma(heparin, EDTA) to each empty well. See "Sample Dilution Guideline" above for details. We recommend that each human CD25 standard solution and each sample is measured in duplicate.

Assay Precision:

- Sample 1: n=16, Mean(ng/ml): 0.22, Standard deviation: 0.014, CV(%): 6.3
- Sample 2: n=16, Mean(ng/ml): 0.63, Standard deviation: 0.041, CV(%): 6.5
- Sample 3: n=16, Mean(ng/ml): 2.53, Standard deviation: 0.132, CV(%): 5.2,
- Sample 1: n=24, Mean(ng/ml): 0.25, Standard deviation: 0.020, CV(%): 8
- Sample 2: n=24, Mean(ng/ml): 0.71, Standard deviation: 0.052, CV(%): 7.3
- Sample 3: n=24, Mean(ng/ml): 2.36, Standard deviation: 0.191, CV(%): 8.1

Restrictions: For Research Use only

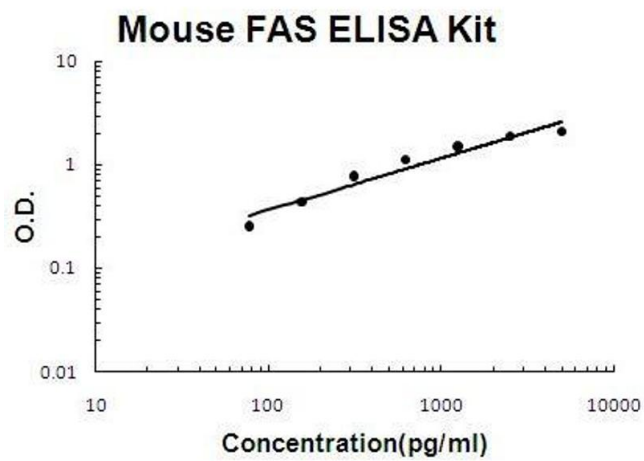
Handling

Handling Advice: Avoid multiple freeze-thaw cycles.

Storage: -20 °C, 4 °C

Storage Comment: Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles

Expiry Date: 12 months



ELISA

Image 1. Human CD25/IL-2sR alpha PicoKine ELISA Kit standard curve