

Product datasheet for TA392479

OriGene Technologies, Inc.

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IL2 Receptor beta (IL2RB) Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: WB

Reactivity: WB: 1:2000~1:5000 Human, Rat, Mouse

Host: Rabbit Isotype: IgG

Clonality: Polyclonal

Immunogen: Synthetic peptide, corresponding to Human IL-2RB/CD122.

Specificity: IL-2RB/CD122 polyclonal antibody detects endogenous levels of IL-2RB/CD122 protein.

Formulation: Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2.

Concentration: 1mg/ml

Conjugation: Unconjugated

Storage: Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze-thaw cycles.

Stability: 1 year

Predicted Protein Size: ~ 64kDa

Gene Name: interleukin 2 receptor subunit beta

Database Link: Entrez Gene 3560 Human

P14784



Background:

Interleukin-2 (IL-2) is a T cell stimulatory cytokine best known for inducing T cell proliferation and NK cell proliferation and activation. IL-2 also promotes peripheral development of regulatory T cells (Tregs). Conversely, IL-2 is involved in the activation-induced cell death (AICD) that is observed post T cell expansion by increasing levels of Fas on CD4+ T cells. The effects of IL-2 are mediated through a trimeric receptor complex consisting of IL-2Ra, IL-2RB, and the common gamma chain, yc. IL-2Ra binds exclusively to IL-2 with low affinity and increases the binding affinity of the whole receptor complex including IL-2RB and yc subunits. IL-15 also binds to IL-2Rβ. yc is used by other cytokines, including IL-4, IL-7, IL-9, IL-15, and IL-21. Binding of IL-2 initiates signaling cascades involving Jak1, Jak3, Stat5, and the PI3K/Akt pathways.IL-2Rβ, also known as CD122, is a type I transmembrane protein that is expressed by natural killer cells and certain subsets of T cells in the periphery. IL-2Rβ surface expression is upregulated following antigen-induced activation. A heteromeric complex composed of IL-2Rβ and yc forms the intermediate affinity IL-2 receptor whereas a complex comprised of all three chains forms the high affinity receptor. Signaling through IL-2RB is mediated by Jak1, which phosphorylates numerous tyrosine residues in the cytoplasmic tail to promote the recruitment of the adaptor Shc to IL-2Rβ and enhance IL-2 receptor signaling.

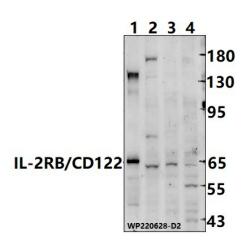
Synonyms:

CD122; High affinity IL-2 receptor subunit beta; IL-2 receptor subunit beta; IL-2RB; IL-2R subunit beta; IL2RB; IL15RB; Interleukin-2 receptor subunit beta; Interleukin-15 receptor subunit beta

Note:

For research use only, not for use in diagnostic procedure.

Product images:



Western blot (WB) analysis of IL-2RB/CD122 polyclonal antibody at 1:2000 dilution Lane1:The Liver tissue lysate of Mouse(30ug) Lane2:PC12 whole cell lysate(30ug) Lane3:HCT116 whole cell lysate(30ug) Lane4:H1792 whole cell lysate(30ug)