

### IL2RA Antibody

Purified Mouse Monoclonal Antibody Catalog # A01825a

# Specification

# IL2RA Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW **Description**  WB, IHC, ICC, E <u>P01589</u> Human, Mouse, Rat, Monkey Mouse Monoclonal IgG1 30.8kDa KDa

The interleukin 2 (IL2) receptor alpha (IL2RA) and beta (IL2RB) chains, together with the common gamma chain (IL2RG), constitute the high-affinity IL2 receptor. Homodimeric alpha chains (IL2RA) result in low-affinity receptor, while homodimeric beta (IL2RB) chains produce a medium-affinity receptor. Normally an integral-membrane protein, soluble IL2RA has been isolated and determined to result from extracellular proteolyisis. Alternately-spliced IL2RA mRNAs have been isolated, but the significance of each is presently unknown. Mutations in this gene are associated with interleukin 2 receptor alpha deficiency.

Immunogen Purified recombinant fragment of human IL2RA (AA: 34-139) expressed in E. Coli.

**Formulation** Purified antibody in PBS with 0.05% sodium azide

### **IL2RA Antibody - Additional Information**

Gene ID 3559

**Other Names** Interleukin-2 receptor subunit alpha, IL-2 receptor subunit alpha, IL-2-RA, IL-2R subunit alpha, IL2-RA, TAC antigen, p55, CD25, IL2RA

Dilution WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 ICC~~N/A E~~1/10000

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### Precautions

IL2RA Antibody is for research use only and not for use in diagnostic or therapeutic procedures.



# IL2RA Antibody - Protein Information

Name IL2RA

Function

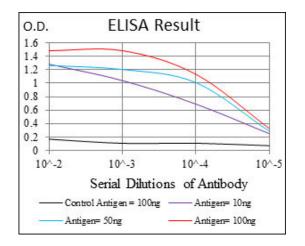
Receptor for interleukin-2. The receptor is involved in the regulation of immune tolerance by controlling regulatory T cells (TREGs) activity. TREGs suppress the activation and expansion of autoreactive T-cells.

**Cellular Location** Membrane; Single-pass type I membrane protein.

### **IL2RA Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>



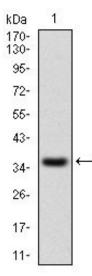


Figure 1: Western blot analysis using IL2RA mAb against human IL2RA recombinant protein. (Expected MW is 37.5 kDa)

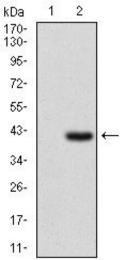


Figure 2: Western blot analysis using IL2RA mAb against HEK293 (1) and IL2RA (AA: 34-139)-hIgGFc transfected HEK293 (2) cell lysate.

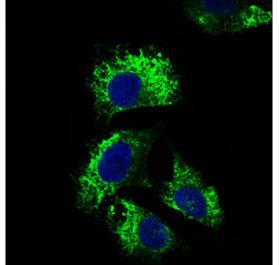


Figure 3: Immunofluorescence analysis of Hela cells using IL2RA mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye.



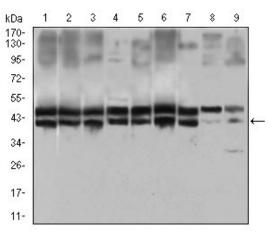


Figure 3: Western blot analysis using IL2RA mouse mAb against Hela (1), MOLT4 (2), HEK293 (3), A549 (4), Jurkat (5), K562 (6), Cos7 (7), PC-12 (8) and NIH/3T3 (9) cell lysate.

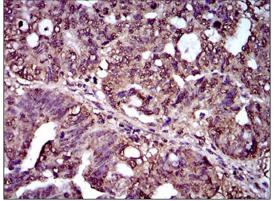


Figure 4: Immunohistochemical analysis of paraffin-embedded rectum cancer tissues using IL2RA mouse mAb with DAB staining.

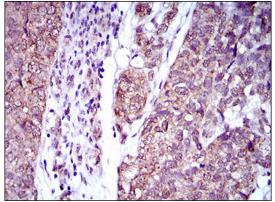


Figure 5: Immunohistochemical analysis of paraffin-embedded bladder cancer tissues using IL2RA mouse mAb with DAB staining.

# IL2RA Antibody - Background

The interleukin 2 (IL2) receptor alpha (IL2RA) and beta (IL2RB) chains, together with the common gamma chain (IL2RG), constitute the high-affinity IL2 receptor. Homodimeric alpha chains (IL2RA) result in low-affinity receptor, while homodimeric beta (IL2RB) chains produce a medium-affinity receptor. Normally an integral-membrane protein, soluble IL2RA has been isolated and determined to result from extracellular proteolyisis. Alternately-spliced IL2RA mRNAs have been isolated, but the significance of each is presently unknown. Mutations in this gene are associated with interleukin 2 receptor alpha deficiency. ; ; ;



# IL2RA Antibody - References

1. Ann Hematol. 2012 Oct;91(10):1597-602. 2. Transplant Proc. 2012 May;44(4):1139-42.