

IL-15RA Antibody

Catalog # ASC11616

Product Information

Application	WB, E
Primary Accession	Q13261
Other Accession	NP_001243694 , 377520151
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	28233
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	IL-15RA antibody can be used for detection of IL-15RA by Western blot at 1 - 2 μ g/mL.

Additional Information

Gene ID	3601
Other Names	Interleukin-15 receptor subunit alpha, IL-15 receptor subunit alpha, IL-15R-alpha, IL-15RA, CD215, Soluble interleukin-15 receptor subunit alpha, sIL-15 receptor subunit alpha, sIL-15R-alpha, sIL-15RA, IL15RA
Target/Specificity	IL15RA; Multiple isoforms of IL-15RA are known to exist.
Reconstitution & Storage	IL-15RA antibody can be stored at 4°C for three months and -20°C, stable for up to one year.
Precautions	IL-15RA Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	IL15RA
Function	High-affinity receptor for interleukin-15 (PubMed: 8530383). Can signal both in cis and trans where IL15R from one subset of cells presents IL15 to neighboring IL2RG-expressing cells (By similarity). In neutrophils, binds and activates kinase SYK in response to IL15 stimulation (PubMed: 15123770). In neutrophils, required for IL15- induced phagocytosis in a SYK-dependent manner (PubMed: 15123770). Expression of different isoforms may alter or interfere with signal transduction (PubMed: 10480910).
Cellular Location	Membrane; Single- pass type I membrane protein. Nucleus membrane; Single-pass type I membrane protein. Cell surface. Note=Mainly found associated with the nuclear membrane [Isoform 6]: Endoplasmic reticulum

membrane; Single-pass type I membrane protein. Golgi apparatus membrane; Single-pass type I membrane protein. Cytoplasmic vesicle membrane; Single-pass type I membrane protein. Membrane; Single-pass type I membrane protein Note=Isoform 5, isoform 6, isoform 7 and isoform 8 are associated with endoplasmic reticulum, Golgi and cytoplasmic vesicles, but not with the nuclear membrane [Isoform 8]: Endoplasmic reticulum membrane; Single-pass type I membrane protein. Golgi apparatus membrane; Single-pass type I membrane protein. Cytoplasmic vesicle membrane; Single-pass type I membrane protein. Membrane; Single-pass type I membrane protein Note=Isoform 5, isoform 6, isoform 7 and isoform 8 are associated with endoplasmic reticulum, Golgi and cytoplasmic vesicles, but not with the nuclear membrane

Tissue Location

Expressed in neutrophils (at protein level) (PubMed:15123770). Expressed in fetal brain with higher expression in the hippocampus and cerebellum than in cortex and thalamus (PubMed:12114302). Higher levels of soluble sIL-15RA form in comparison with membrane-bound forms is present in all brain structures (PubMed:12114302). Isoforms 1, 3, 4, 5, 6, 7, 8 and 9: Widely expressed (PubMed:10480910, PubMed:8530383).

Background

IL-15RA Antibody: Interleukin 15 (IL-15RA) is a cytokine receptor that specifically binds IL-15 with high affinity. IL-15 regulates T and natural killer cell activation and proliferation. The IL-15 and IL-2 receptors share two subunits, IL-2R beta and IL-2R gamma, and IL-15RA is structurally related to IL-2RA, an additional IL-2-specific alpha subunit necessary for high affinity IL-2 binding. Unlike IL-2RA, IL-15RA is capable of binding IL-15 with high affinity independent of the other subunits. IL-15RA is thought to enhance cell proliferation and expression of apoptosis inhibitor Bcl-xL and Bcl-2.

References

Giri JG, Kumaki S, Ahdieh M, et al. Identification and cloning of a novel IL-15 binding protein that is structurally related to the alpha chain of the IL-2 receptor. *EMBO J.* 1995; 14:3654-63.
Bodnar A, Nizsaloczki E, Mocsar G, et al. A biophysical approach to IL-2 and IL-15 receptor function: localization, conformation and interactions. *Immunol. Lett.* 2008; 116:117-25.
Lorenz HM, Hieronymus T, Grunke M, et al. Differential role for IL-2 and IL-15 in the inhibition of apoptosis in short-term activated human lymphocytes. *Scand. J. Immunol.* 1997; 45:660-9.

Images

