

OriGene Technologies, Inc.

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Product datasheet for DDX0700A546-100

IL7R alpha (IL7R) Mouse Monoclonal Antibody [Clone ID: R34-34]

Product data:

Product Type: Primary Antibodies

Clone Name: R34-34

Applications: IF

Recommend Dilution: DDX0700P-50 / DDX0700P-100 Purified: FACS surface, Neutralization (IL7- binding inhibition),

Immunoprecipitation.

DDX0700A488-50 / DDX0700A488-100 Alexa-fluor®488: Surface Flow cytometry.

DDX0700A546-50 / DDX0700A546-100 Alexa-fluor®546: IF.

DDX0700A647-50 / DDX0700A647-100 Alexa-fluor®647: Surface Flow cytometry.

Usage recommendation:

*This monoclonal antibody may be used between 5-20 µg/ml.

*Optimal dilution should be determined by each laboratory for each application.

*Coupled antibody: to maintain RT before using.

Reactivity: Canine, Human

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

Immunogen: Human leukemic pre-B cells.

Specificity: Human IL7-Rα.

Formulation: Purified: 100 μg in 200μl / 50 μg in 100 μl Tris-NaCl pH 8.

Coupled: 100 μg in 200μl / 50 μg in 100 μl Tris PBS 50% glycerol.

Label: Alexa Fluor 546

Concentration: 0.5 mg/ml

Purification: QMA Hyper D ion exchange chromatography

Conjugation: Alexa Fluor 546

Gene Name: interleukin 7 receptor

Database Link: Entrez Gene 3575 Human





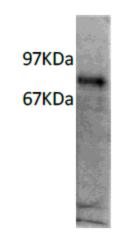
Background:

The IL7-R consists of 2 chains, IL-7Rα known as CD127 and common cytokine receptor y chain known as CD132. A 75 to 80kDa human IL-7 receptor has been cloned that belongs to hematopoietic cytokinereceptor super family. R34-34, raised against human leukemic pre-B cells, recognized a molecule expressed on normal B cell precursors but not on mature B cells. This antibody specifically reverted IL-7 mediated growth inhibition of leukemic BCP (normal B cells precursors) and mature T cells. IL-7Rα expression is dramatically influenced by cytokines and antigens. This IL-7R displays both high and low affinity for its ligand (IL-7). Inhibitory and proliferative effects of IL-7 can be mediated through the same receptor on various lineages. CD4+ memory T cells express high level of IL-7R Subsets that express it generally require it, including progenitors of T and B cells, naïve and memory T cells. (*Pandrau-Garcia D et al, 1994, Blood, 83, 3613-9 ; Mazzucchelli R et al, Nat. Review Immunol., 2007,7, 144-54*).

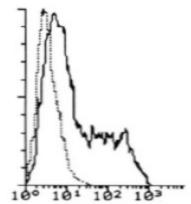
Synonyms:

Interleukin-7 receptor subunit alpha, IL-7R-alpha, IL7 receptor alpha

Product images:

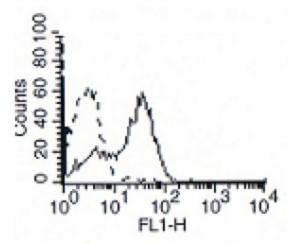


Immunoprecipitation of R34-34 antigen from 125I-surface labelled Pre-Alp cells



Facs staining of R34-34-transfected Cos7 cells





Facs staining of PBL with R34-34