

# Recombinant Human IL3RA Protein, hFc-tagged, Alexa Fluor 555 conjugated

**Cat. No.** IL3RA-121HAF555    **Lot. No.** (See product label)

## SPECIFICATION

### Product Overview

Alexa Fluor 555 conjugated recombinant human IL3RA protein (Met1-Arg305) was fused to human IgG1 Fc tag at C-terminus and expressed in HEK293 Cells.

### Species

Human

### Source

HEK293

### ProteinLength

525

### Description

Interleukin-3 receptor subunit alpha, also known as IL-3 receptor subunit alpha, IL-3R-alpha, CD123, and IL3RA, is a single-pass type I membrane protein which belongs to the type I cytokine receptor family and Type 5 subfamily. The specific alpha subunit of the interleukin-3 receptor (IL-3Ralpha, CD123) is strongly expressed in various leukemic blasts and leukemic stem cells and seems to be an excellent target for the therapy of leukemias. The WSXWS motif of IL3RA appears to be necessary for proper protein folding and thereby efficient intracellular transport and cell-surface receptor binding. The box one motif of IL3RA is required for JAK interaction and/or activation. IL3RA represents a unique marker for primitive leukemic stem cells. Targeting of IL3RA may be a promising strategy for the preferential ablation of AML cells. Aberrant IL3RA expression is a good marker for monitoring of minimal residual disease. IL3RA is strongly expressed in various leukemic blasts and leukemic stem cells and seems to be an excellent target for the therapy of leukemias. Recent studies have shown that interleukin-3 receptor alpha (CD123) is highly

 Tel: 1-631-559-9269    1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

expressed on leukemia stem cells of patients with acute myeloid leukemia, and is correlated with tumor load and poor prognosis. CD123 was highly expressed in the bone marrow of the patients with myelodysplastic syndrome (MDS), significantly correlated with the proportion of bone marrow blasts, and thus might be the marker of MDS malignant clone. IL3RA is also a useful new marker for distinguishing B-cell disorders with circulating villous lymphocytes as its expression is characteristic of typical hairy cell leukemia (HCL) with high sensitivity and specificity.

<b>Form</b>	Lyophilized
<b>Molecular Mass</b>	59.8 kDa
<b>N-terminal Sequence Analysis</b>	Thr 19
<b>Endotoxin</b>	< 1.0 EU/ µg protein as determined by the LAL method.
<b>Purity</b>	> 95 % as determined by SDS-PAGE
<b>Characteristic</b>	Disulfide-linked homodimer Labeled with Alexa Fluor 555 via amines With an excitation and emission maximum of 555/565 nm, Alexa Fluor 555 can be efficiently excited using a 543 nm He-Ne laser line and detected under standard TRITC/Cy3 filters.
<b>Stability</b>	Samples are stable for up to 12 months from date of receipt at -20 to -80 centigrade.
<b>Storage</b>	Store it under sterile conditions at -20 to -80 centigrade. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
<b>Storage Buffer</b>	Lyophilized from sterile PBS, pH 7.4.

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**Shipping** Shipped at ambient temperature.  
Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

**Conjugation** Alexa Fluor 555

## GENE INFORMATION

**Gene Name** IL3RA

**Official Symbol** IL3RA

**Synonyms** IL3R; CD123; IL3RX; IL3RY; IL3RAY; hIL-3Ra

**Gene ID** 3563

**mRNA Refseq** NM\_002183

**Protein Refseq** NP\_002174

**MIM** 308385

**UniProt ID** P26951

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