

Product datasheet

Anti-IL3RA/CD123 antibody [EPR24481-20] ab280355

Recombinant RabMAb

9 Images

Overview

Product name	Anti-IL3RA/CD123 antibody [EPR24481-20]
Description	Rabbit monoclonal [EPR24481-20] to IL3RA/CD123
Host species	Rabbit
Tested applications	Suitable for: IP, Flow Cyt, WB, ICC/IF, IHC-P
Species reactivity	Reacts with: Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Human tonsil, HDLM-2, KG-1a lysates. IHC-P: Human tonsil and Hodgkin's lymphoma tissues. ICC/IF: HDLM-2 cells. Flow Cyt: HDLM-2, Human peripheral blood mononuclear cells. IP: HDLM-2 cells
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.01% Sodium azide Constituents: 59.94% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR24481-20
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab280355 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IP		1/30.
Flow Cyt		1/500.
WB		1/1000. Predicted molecular weight: 43 kDa.
ICC/IF		1/1000.
IHC-P		1/500.

Target

Function

This is a receptor for interleukin-3.

Sequence similarities

Belongs to the type I cytokine receptor family. Type 5 subfamily.

Domain

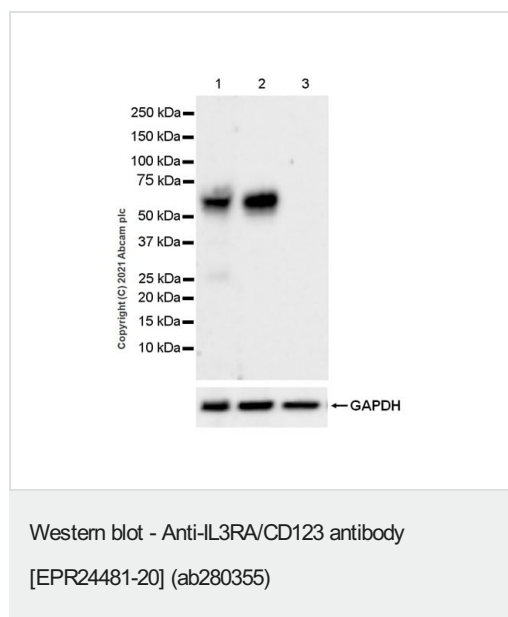
The WSXWS motif appears to be necessary for proper protein folding and thereby efficient intracellular transport and cell-surface receptor binding.

The box 1 motif is required for JAK interaction and/or activation.

Cellular localization

Membrane.

Images



All lanes : Anti-IL3RA/CD123 antibody [EPR24481-20] (ab280355) at 1/1000 dilution

Lane 1 : Human tonsil tissue lysate at 40 µg

Lane 2 : HDLM-2 (human hodgkin lymphoma) whole cell lysate at 20 µg

Lane 3 : K-562 (human chronic myelogenous leukemia lymphoblast) whole cell lysate at 20 µg

Secondary

Lane 1 : Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

Lanes 2-3 : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/50000 dilution (Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated)

Predicted band size: 43 kDa

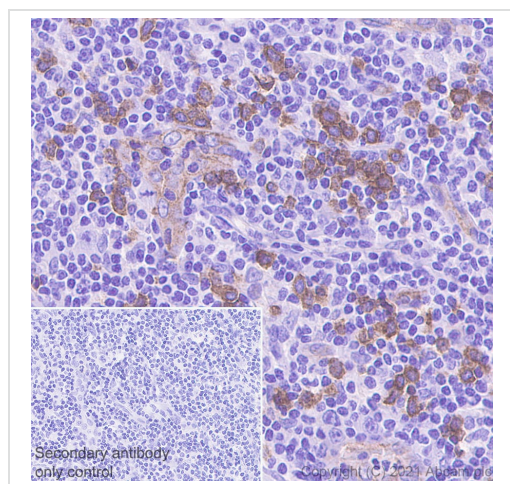
Observed band size: 60 kDa

Blocking and diluting buffer and concentration: 5% NFDN/TBST

The expression profile/molecular weight observed is consistent with what has been described in the literature (PMID:30647406).

Negative control: K-562 cell (PMID: 30647406)

Exposure time: 37 seconds

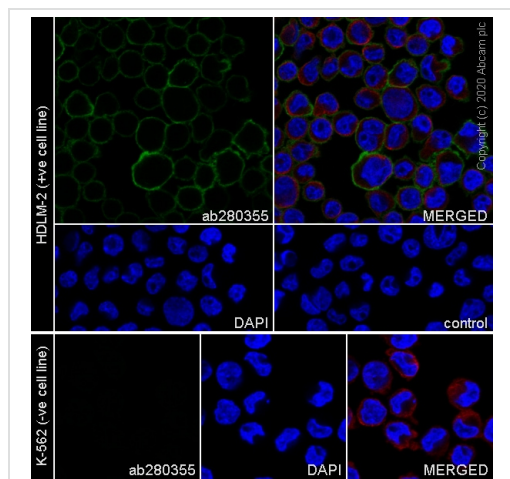


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IL3RA/CD123 antibody [EPR24481-20] (ab280355)

Immunohistochemical analysis of paraffin-embedded human tonsil tissue labeling IL3RA/CD123 with ab280355 at 1/500 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Positive staining on human tonsil (PMID: 27340692, PMID:15728234, PMID:28205524). The section was incubated with ab280355 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.



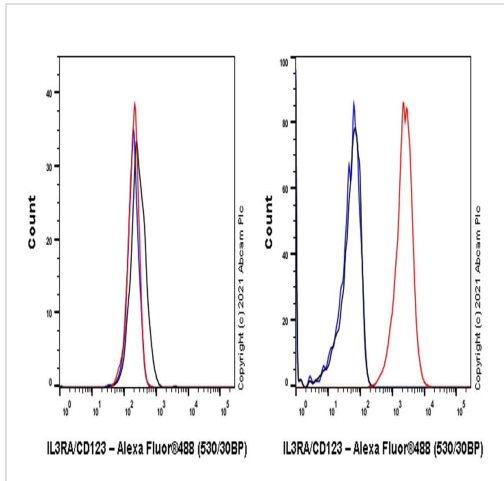
Immunocytochemistry/ Immunofluorescence - Anti-IL3RA/CD123 antibody [EPR24481-20] (ab280355)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HDLM-2 cells labelling IL3RA/CD123 with ab280355 at 1/1000 dilution, followed by **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) antibody at 1/1000 dilution (Green). Confocal image showing membranous staining in HDLM-2 cells.

Negative control: K-562 (PMID: 26531164).

ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) at a 1/200 dilution (Red). The nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 dilution.

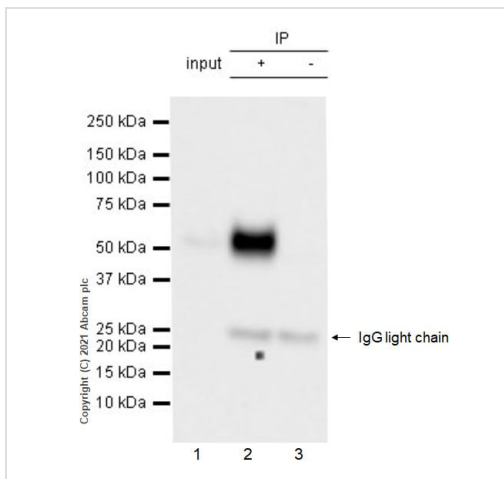


Flow Cytometry - Anti-IL3RA/CD123 antibody
[EPR24481-20] (ab280355)

Flow cytometric analysis of K-562(Human chronic myelogenous leukemia lymphoblast, Left)/ HDLM-2(Human Hodgkin lymphoma, Right) cells labelling IL3RA/CD123 with ab280355 at 1/500 dilution (0.1ug)/ red compared with a Rabbit monoclonal IgG (**ab172730**) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) at 1/2000 dilution was used as the secondary antibody.

Negative control: K-562 cell (PMID: 26531164).

Gated on viable cells.



Immunoprecipitation - Anti-IL3RA/CD123 antibody
[EPR24481-20] (ab280355)

IL3RA/CD123 was immunoprecipitated from 0.35 mg HDLM-2 (human hodgkin lymphoma) whole cell lysate 10 µg with ab280355 at 1/30 dilution (2µg in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab280355 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP)(**ab131366**) was used at 1/5000 dilution.

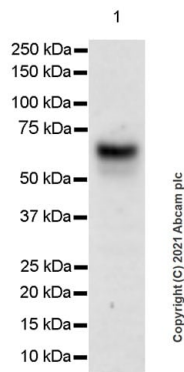
Lane 1: HDLM-2 whole cell lysate 10 µg

Lane 2: ab280355 IP in HDLM-2 whole cell lysate

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of ab280355 in HDLM-2 whole cell lysate

Blocking and dilution buffer and concentration: 5% NFDm/TBST.

Exposure time: 32 seconds



Western blot - Anti-IL3RA/CD123 antibody
[EPR24481-20] (ab280355)

Anti-IL3RA/CD123 antibody [EPR24481-20] (ab280355) at 1/1000 dilution + KG-1a (human bone marrow myeloblast) whole cell lysate at 20 µg

Secondary

Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

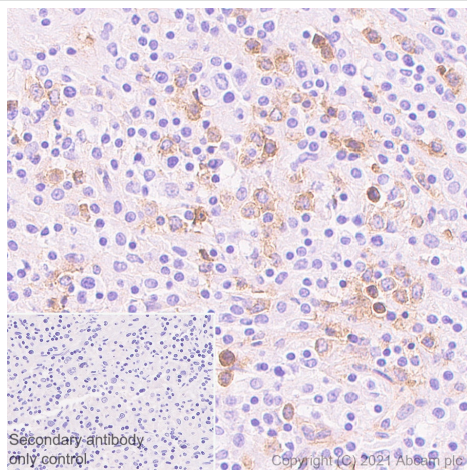
Predicted band size: 43 kDa

Observed band size: 60 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST

The expression profile/molecular weight observed is consistent with what has been described in the literature (PMID:30647406).

Exposure time: 103 seconds

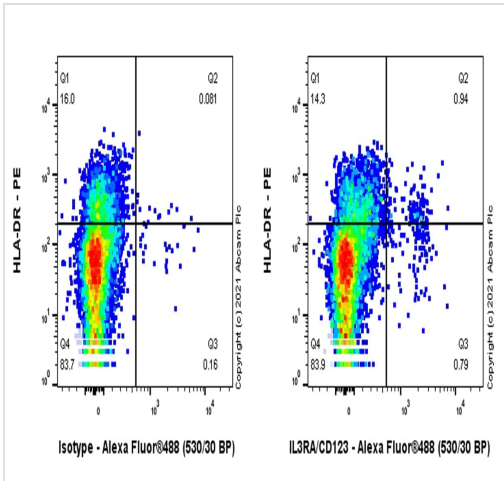


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IL3RA/CD123 antibody
[EPR24481-20] (ab280355)

Immunohistochemical analysis of paraffin-embedded human Hodgkin's lymphoma tissue labeling IL3RA/CD123 with ab280355 at 1/500 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)). Positive staining on human Hodgkin's lymphoma. The section was incubated with ab280355 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.







Flow Cytometry - Anti-IL3RA/CD123 antibody
[EPR24481-20] (ab280355)

Flow cytometric analysis of human peripheral blood mononuclear cell (PBMC) cells labelling IL3RA/CD123 with ab280355 at 1/500 dilution (0.1 ug)/ Right compared with a Rabbit monoclonal IgG (**ab172730**) / Left isotype control. Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) at 1/2000 dilution was used as the secondary antibody.

Cells were stained with rabbit IgG or ab280355. Then stained with anti-HLA-DR conjugated to PE.

Gated on viable cells.

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

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(ab280355)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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