

Product datasheet

Anti-IL-4R antibody [EPR22196-2] - BSA and Azide free (Capture) ab259457

Recombinant RabMAb

2 Images

Overview		
Product name	Anti-IL-4R antibody [EPR22196-2] - BSA and Azide free (Capture)	
Description	Rabbit monoclonal [EPR22196-2] to IL-4R - BSA and Azide free (Capture)	
Host species	Rabbit	
Tested applications	Suitable for: Sandwich ELISA	
Species reactivity	Reacts with: Mouse	
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.	
General notes	ab259457 is a BSA and Azide Free antibody supplied in an unconjugated format and it is suitable for sandwich ELISAs to quantify Mouse IL4R. The recommended pair for sandwich ELISA is: Capture: ab259457, Mouse IL4R Capture Antibody (unconjugated) Detector: <u>ab259458</u> , Mouse IL4R Detector Antibody (unconjugated) The reference range value is 31.25 - 2000 pg/ml.	
	Our <u>carrier-free</u> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.	
	This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.	
	Use our <u>conjugation kits</u> for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.	
	The recommended antibody orientation is based on internal optimization for ELISA-based assays. Antibody orientation is assay dependent and needs to be optimized for each assay type. Please note that the range provided for this antibody is only an estimation based on the performance of the product using the recommended antibody pair. Performance of the antibody pair will depend on the specific characteristics of your assay. We guarantee the product works in sandwich ELISA, but we do not guarantee the sensitivity or dynamic range of the antibody in your assay.	
	This product is a recombinant monoclonal antibody, which offers several advantages including:	

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production
- For more information see here.

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <u>RabMAb[®] patents</u>.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C.
Storage buffer	Constituent: 100% PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR22196-2
lsotype	lgG

Applications

The Abpromise guarantee Our <u>Abpromise guarantee</u> covers the use of ab259457 in the following tested applications.

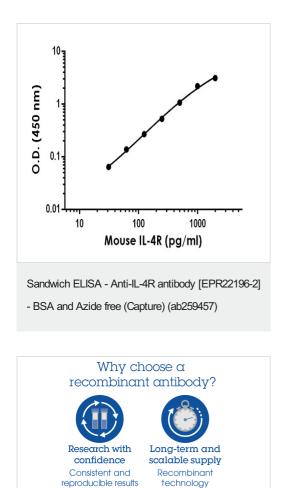
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Sandwich ELISA		Use at an assay dependent concentration. Can be paired for Sandwich ELISA with Rabbit monoclonal [EPR22196-236] to IL-4R - BSA and Azide free (Detector) (ab259458) .

Target	
Function	Receptor for both interleukin 4 and interleukin 13. Couples to the JAK1/2/3-STAT6 pathway. The IL4 response is involved in promoting Th2 differentiation. The IL4/IL13 responses are involved in regulating IgE production and, chemokine and mucus production at sites of allergic inflammmation. In certain cell types, can signal through activation of insulin receptor substrates, IRS1/IRS2. Soluble IL4R (sIL4R) inhibits IL4-mediated cell proliferation and IL5 up-regulation by T-cells.
Tissue specificity	lsoform 1 and isoform 2 are highly expressed in activated T-cells.
Sequence similarities	Belongs to the type I cytokine receptor family. Type 4 subfamily. Contains 1 fibronectin type-III domain.
Domain	The extracellular domain represents the IL4 binding protein (IL4BP). 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. Contains 1 copy of a cytoplasmic motif that is referred to as the immunoreceptor tyrosine-based inhibitor motif (ITIM). This motif is involved in modulation of cellular responses. The phosphorylated ITIM motif can bind the SH2 domain of several SH2-containing phosphatases.
Post-translational modifications	On IL4 binding, phosphorylated on C-terminal tyrosine residues. Phosphorylation on any one of tyrosine residues, Tyr-575, Tyr-603 or Tyr-631, is required for STAT6-induced gene induction. The soluble form (sIL4R/IL4BP) can also be produced by proteolytic cleavage at the cell surface (shedding) by a metalloproteinase.
Cellular localization	Secreted and Cell membrane.

Images



Success from the Ethical standards

Anti-IL-4R antibody [EPR22196-2] - BSA and Azide

compliant

Animal-free

production

first experiment

Confirmed

specificity

free (Capture) (ab259457)

Representative standard curve from corresponding SimpleStep ELISA® Kit (ab256403).

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

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