# abcam

# Product datasheet

# Anti-IL-4R (phospho Y497) antibody ab61099

# 1 References 2 Images

Overview

Product name Anti-IL-4R (phospho Y497) antibody

**Description** Rabbit polyclonal to IL-4R (phospho Y497)

Host species Rabbit

Specificity Detects endogenous levels of IL4R only when phosphorylated at tyrosine 497 (corresponding to

mouse tyrosine 500)

Tested applications Suitable for: WB, ICC/IF

Species reactivity Reacts with: Human

Predicted to work with: Mouse

**Immunogen** Synthetic peptide corresponding to Human IL-4R aa 450-550 (phospho Y497).

Database link: P24394

Positive control 293 and HeLa cells

General notes

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or

contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

**Properties** 

Form Liquid

**Storage instructions** Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

**Storage buffer** pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: PBS, 50% Glycerol, 0.87% Sodium chloride

Purity Immunogen affinity purified

**Purification notes** Purified from rabbit antiserum by affinity chromatography, using epitope specific phosphopeptide.

The antibody against non-phosphopeptide was removed by chromatography using non-

phosphopeptide corresponding to the phosphorylation site.

1

**Clonality** Polyclonal

**Isotype** IgG

#### **Applications**

# The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab61099 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
WB		1/500 - 1/1000. Detects a band of approximately 89 kDa (predicted molecular weight: 89 kDa).
ICC/IF		1/500 - 1/1000.

## **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** Isoform 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 tyros

On IL4 binding, phosphorylated on C-terminal tyrosine residues. Phosphorylation on any one of

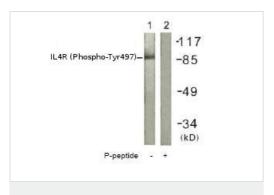
 $tyrosine\ residues,\ Tyr-575,\ Tyr-603\ or\ Tyr-631,\ is\ required\ for\ STAT6-induced\ gene\ induction.$ 

The soluble form (slL4R/lL4BP) can also be produced by proteolytic cleavage at the cell surface  $\,$ 

(shedding) by a metalloproteinase.

**Cellular localization** Secreted and Cell membrane.

#### **Images**



Western blot - Anti-IL-4R (phospho Y497) antibody (ab61099)

**All lanes :** Anti-IL-4R (phospho Y497) antibody (ab61099) at 1/500 dilution

Lane 1: Extracts from 293 cells

Lane 2: Extracts from 293 cells with immunizing phosphopeptide

Predicted band size: 89 kDa Observed band size: 89 kDa



ICC/IF image of ab61099 (at a 1/500 dilution) stained HeLa cells, minus immunising peptide (left image) and plus immunising peptide (right image).

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

### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.com/abpromise">https://www.abcam.com/abpromise</a> or contact our technical team.

#### Terms and conditions

•	Guarantee only valid for products bought direct from Abcam or one of our authorized distributors				