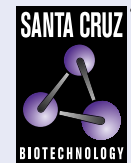


IL-4R α (H-4): sc-28361

The Power to Question

BACKGROUND

The IL-2 receptor is a multicomponent complex consisting of three subunits, α , β and γ , each of which is required for high affinity binding of IL-2. The α chain functions primarily in binding IL-2, whereas the β and γ chains contribute to IL-2 binding and are essential to IL-2-induced activation of signaling pathways leading to T cell growth. Both IL-4R and IL-7R were initially described as single chain, high-affinity ligand-binding cytokine receptors. However, it is now well established that the IL-2R γ chain functions as a second subunit of the high affinity IL-4R and IL-7R receptors. Consequently, the originally described subunits of these latter receptors are now referred to as IL-4R α and IL-7R α , respectively, while the common subunit is referred to as γ_c . Although the common γ chain enhances ligand binding in these three cytokine receptors, it has no capacity to bind these ligands on its own. There is evidence that the γ_c chain is also a subunit of IL-13R.

CHROMOSOMAL LOCATION

Genetic locus: IL4R (human) mapping to 16p12.1; Il4ra (mouse) mapping to 7 F3.

SOURCE

IL-4R α (H-4) is a mouse monoclonal antibody raised against amino acids 526-825 of IL-4R α of human origin.

PRODUCT

Each vial contains 200 μ g IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

IL-4R α (H-4) is available conjugated to agarose (sc-28361 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-28361 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-28361 PE), fluorescein (sc-28361 FITC), Alexa Fluor[®] 488 (sc-28361 AF488), Alexa Fluor[®] 546 (sc-28361 AF546), Alexa Fluor[®] 594 (sc-28361 AF594) or Alexa Fluor[®] 647 (sc-28361 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-28361 AF680) or Alexa Fluor[®] 790 (sc-28361 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

IL-4R α (H-4) is recommended for detection of IL-4R α of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for IL-4R α siRNA (h): sc-35661, IL-4R α siRNA (m): sc-35662, IL-4R α shRNA Plasmid (h): sc-35661-SH, IL-4R α shRNA Plasmid (m): sc-35662-SH, IL-4R α shRNA (h) Lentiviral Particles: sc-35661-V and IL-4R α shRNA (m) Lentiviral Particles: sc-35662-V.

Molecular Weight of IL-4R α : 140 kDa.

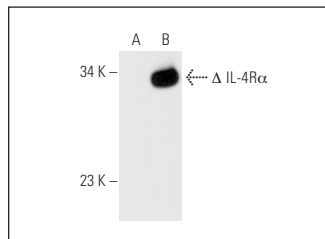
Molecular Weight of IL-4R α glycoprotein: 130 kDa.

Positive Controls: IL-4R α (m): 293T Lysate: sc-127006.

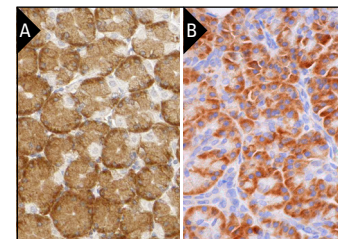
STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA



IL-4R α (H-4): sc-28361. Western blot analysis of truncated IL-4R α expression in non-transfected: sc-117752 (A) and mouse IL-4R α transfected: sc-127006 (B) 293T whole cell lysates.



IL-4R α (H-4): sc-28361. Immunoperoxidase staining of formalin fixed, paraffin-embedded human stomach tissue showing membrane and cytoplasmic staining of glandular cells. Chief cells strongly stained. Kindly provided by The Swedish Human Protein Atlas (HPA) program (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human pancreas tissue showing cytoplasmic staining of exocrine glandular cells (B).

SELECT PRODUCT CITATIONS

- White, S.R., et al. 2010. Expression of IL-4/IL-13 receptors in differentiating human airway epithelial cells. *Am. J. Physiol. Lung Cell. Mol. Physiol.* 299: L681-L693.
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- Nakajima, M., et al. 2014. Th2 cytokines efficiently stimulate periostin production in gingival fibroblasts but periostin does not induce an inflammatory response in gingival epithelial cells. *Arch. Oral Biol.* 59: 93-101.
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- Shi, J., et al. 2022. Loss of interleukin-13-receptor- α -1 induces apoptosis and promotes EMT in pancreatic cancer. *Int. J. Mol. Sci.* 23: 3659.
- Chen, D., et al. 2022. Interleukin-4 promotes microglial polarization toward a neuroprotective phenotype after retinal ischemia/reperfusion injury. *Neural Regen. Res.* 17: 2755-2760.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

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