

IL-3/IL-5/GM-CSFR β (N-20): sc-676

BACKGROUND

The human IL-3, IL-5 and GM-CSF receptors are each composed of both unique α subunits and a common β subunit. The α subunits are low-affinity ligand binding proteins while the β subunits do not themselves bind ligands, but are required for high-affinity binding by the α subunits. In contrast, the mouse IL-3 receptor has two distinct β subunits, one that functions only in IL-3 mediated cell signaling and a second that is shared with IL-5 and GM-CSF. The murine β subunits are 91% homologous at the amino acid level but only 56% homologous to the human β subunit. Although neither the murine nor the human β subunit contains tyrosine kinase domains, both activate tyrosine phosphorylation mediated signaling pathways.

CHROMOSOMAL LOCATION

Genetic locus: CSF2RB (human) mapping to 22q12.3.

SOURCE

IL-3/IL-5/GM-CSFR β (N-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the N-terminus of IL-3/IL-5/GM-CSFR β of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-676 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

IL-3/IL-5/GM-CSFR β (N-20) is recommended for detection of 130 kDa β chain common to IL-3R, IL-5R and GM-CSFR of human origin by Western Blotting (starting dilution 1:200, 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-3/IL-5/GM-CSFR β siRNA (h): sc-35658, IL-3/IL-5/GM-CSFR β shRNA Plasmid (h): sc-35658-SH and IL-3/IL-5/GM-CSFR β shRNA (h) Lentiviral Particles: sc-35658-V.

Molecular Weight of IL-3/IL-5/GM-CSFR β : 130 kDa.

Positive Controls: THP-1 cell lysate: sc-2238, HuT 78 whole cell lysate: sc-2208 or HL-60 whole cell lysate: sc-2209.

STORAGE

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

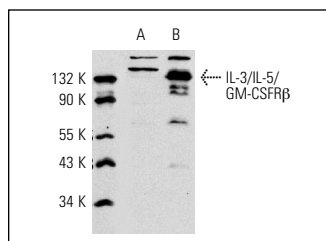
PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

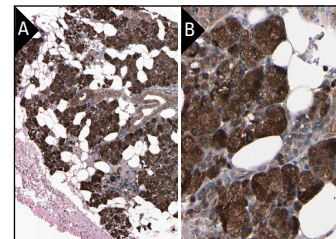
RESEARCH USE

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

DATA



IL-3/IL-5/GM-CSFR β (N-20): sc-676. Western blot analysis of IL-3/IL-5/GM-CSFR β expression in HL-60 (A) and HuT 78 (B) whole cell lysates.



IL-3/IL-5/GM-CSFR β (N-20): sc-676. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human salivary gland tissue showing cytoplasmic staining of glandular cells at low (A) and high (B) magnification. Kindly provided by The Swedish Human Protein Atlas (HPA) program.

SELECT PRODUCT CITATIONS

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- Radtke, S. and Jörissen, A. 2006. Three dileucine-like motifs within the interbox1/2 region of the human oncostatin M receptor prevent efficient surface expression in the absence of an associated Janus kinase. *J. Biol. Chem.* 281: 4024-4034.
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- Su, K.H., et al. 2011. β common receptor integrates the erythropoietin signaling in activation of endothelial nitric oxide synthase. *J. Cell. Physiol.* 226: 3330-3339.
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