SANTA CRUZ BIOTECHNOLOGY, INC.

IL-1F8 (R-15): sc-168158

BACKGROUND

IL-1 (Interleukin-1) is a cytokine responsible for initiating a variety of activities through the activation of transcription factors, NFκB and AP-1, thereby promoting host response to injury or infection. The IL-1 superfamily is comprised of several ligands and receptors. IL-1F8, also known as IL-1h, or interleukin-1 homolog 2 (IL-1H2), is a secreted ligand belonging to this superfamily. IL-1F8 is highly expressed in epithelial cells but is also found in skeletal muscle and glial cells. IL-1F8 activates the IL-1Rrp2 and IL-1RAcP-dependent pathways leading to MAPKs, NFκB activation and stimulation of IL-6 and IL-8 production. In addition, IL-1F8 may play a role in the pathogenesis of rheumatoid arthritis (RA). Two isoforms exist for this protein, isoform 1 and isoform 2. These isoforms differ from one another in their amino acid sequences between residues 88 and 164.

REFERENCES

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4. Timms, A.E., et al. 2004. The interleukin 1 gene cluster contains a major susceptibility locus for ankylosing spondylitis. Am. J. Hum. Genet. 75: 587-595.
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7. Magne, D., et al. 2006. The new IL-1 family member IL-1F8 stimulates production of inflammatory mediators by synovial fibroblasts and articular chondrocytes. Arthritis Res. Ther. 8: R80.
8. Barksby, H.E., et al. 2007. The expanding family of interleukin-1 cytokines and their role in destructive inflammatory disorders. Clin. Exp. Immunol. 149: 217-225.
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CHROMOSOMAL LOCATION

Genetic locus: Il1f8 (rat) mapping to 3p13.

SOURCE

IL-1F8 (R-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of IL-1F8 of rat origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-168158 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

IL-1F8 (R-15) is recommended for detection of IL-1F8 of rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other IL-1F family members.

Molecular Weight of IL-1F8: 19 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

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