

ISG15 (M-20): sc-18421

BACKGROUND

Interferon-induced 15 kDa protein (ISG15) acts as ubiquitin by conjugating to intracellular target proteins such as JAK1 or MAPK3/ERK1, through an enzyme pathway distinct from that of ubiquitin. ISG15 shows specific chemotactic activity towards neutrophils and activates them to induce the release of eosinophil chemotactic factors. ISG15 is also involved in paracrine, autocrine and endocrine mechanisms, as in cell-to-cell signaling, possibly partly by inducing IFN-gamma secretion by monocytes and macrophages. ISG15 is a cytoplasmic protein expressed mainly in muscle, epithelia, neurons and lymphoid cells.

REFERENCES

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2. Knight, E. Jr., et al. 1991. IFN-induced 15-kDa protein is released from human lymphocytes and monocytes. *J. Immunol.* 146: 2280-2284.
3. Kim, K.I., et al. 2003. ISG15, not just another ubiquitin-like protein. *Biochem. Biophys. Res. Comm.* 307: 431-434. PMID 12893238
4. Liu, M., et al. 2003. Proteasomes modulate conjugation to the ubiquitin-like protein, ISG15. *J. Biol. Chem.* 278: 1594-1602. PMID 12426315
5. Ritchie, K.J., et al. 2004. Role of ISG15 protease UBP43 (USP18) in innate immunity to viral infection. *Nat. Med.* 10: 1374-1378. PMID 15531891
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7. Swiss-Prot/TrEMBL (P05161). World Wide Web URL: <http://www.expasy.ch/sprot/sprot-top.html>

CHROMOSOMAL LOCATION

Genetic locus: Isg15 (mouse) mapping to 4 E2.

SOURCE

ISG15 (M-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of ISG15 of mouse 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-18421 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

ISG15 (M-20) is recommended for detection of ISG15 of mouse and, to a lesser extent, rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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).

Suitable for use as control antibody for ISG15 siRNA (m): sc-60049, ISG15 shRNA Plasmid (m): sc-60049-SH and ISG15 shRNA (m) Lentiviral Particles: sc-60049-V.

Molecular Weight of ISG15: 15 kDa.

Positive Controls: ISG15 (m): 293T Lysate: sc-121117.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

PROTOCOLS

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



Try **ISG15 (F-9): sc-166755** or **ISG15 (E-9): sc-166794**, our highly recommended monoclonal alternatives to ISG15 (M-20). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **ISG15 (F-9): sc-166755**.