

ISG15 (R-140): sc-50368

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. It is also involved in paracrine, autocrine and endocrine mechanisms, as in cell-to-cell signaling, possibly partly by inducing IFN- γ secretion by monocytes and macrophages. ISG15 is a cytoplasmic protein expressed mainly in muscle, epithelia, neurons and lymphoid cells.

REFERENCES

1. Knight, E. Jr., et al. 1991. IFN-induced 15 kDa protein is released from human lymphocytes and monocytes. *J. Immunol.* 146: 2280-2284.
2. Loeb, K.R., et al. 1992. The interferon-inducible 15 kDa ubiquitin homolog conjugates to intracellular proteins. *J. Biol. Chem.* 267: 7806-7813.
3. Kim, K.I., et al. 2003. ISG15, not just another ubiquitin-like protein. *Biochem. Biophys. Res. Commun.* 307: 431-434.
4. Liu, M., et al. 2003. Proteasomes modulate conjugation to the ubiquitin-like protein, ISG15. *J. Biol. Chem.* 278: 1594-1602.
5. Austin, K.J., et al. 2004. Localization of ISG15 and conjugated proteins in bovine endometrium using immunohistochemistry and electron microscopy. *Endocrinology* 145: 967-975.

CHROMOSOMAL LOCATION

Genetic locus: ISG15 (human) mapping to 1p36.33; Isg15 (mouse) mapping to 4 E2.

SOURCE

ISG15 (R-140) is a rabbit polyclonal antibody raised against amino acids 1-90 mapping at the N-terminus of ISG15 of rat origin.

PRODUCT

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

APPLICATIONS

ISG15 (R-140) is recommended for detection of ISG15 of mouse and rat 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ISG15 siRNA (h): sc-43869, ISG15 siRNA (m): sc-60049, ISG15 shRNA Plasmid (h): sc-43869-SH, ISG15 shRNA Plasmid (m): sc-60049-SH, ISG15 shRNA (h) Lentiviral Particles: sc-43869-V and ISG15 shRNA (m) Lentiviral Particles: sc-60049-V.

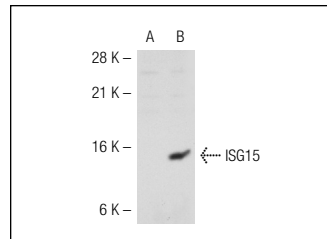
Molecular Weight of ISG15: 15 kDa.

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 goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



ISG15 (R-140): sc-50368. Western blot analysis of ISG15 expression in non-transfected: sc-117752 (A) and mouse ISG15 transfected: sc-121117 (B) 293T whole cell lysates.

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.


 MONOS
Satisfaction
Guaranteed

Try **ISG15 (F-9): sc-166755** or **ISG15 (E-9): sc-166794**, our highly recommended monoclonal alternatives to ISG15 (R-140). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **ISG15 (F-9): sc-166755**.