

# ISG20L2 (G-12): sc-164706

## BACKGROUND

ISG20L2 (interferon-stimulated 20 kDa exonuclease-like 2), also known as HSD38, is a 353 amino acid nuclear protein that contains one exonuclease domain. ISG20L2 acts as an exoribonuclease involved in ribosome biogenesis and exhibits a strong specificity for free hydroxyl groups present on the 3' end of rRNA. Exhibiting 3' to 5' exoribonuclease activity, ISG20L2 is involved in the biogenesis of large ribosomal subunits via the processing of the 12 S precursor rRNA. The gene encoding ISG20L2 maps to human chromosome 1q23.1 and mouse chromosome 3 F1. Human chromosome 1 spans 260 million base pairs, contains over 3,000 genes, comprises nearly 8% of the human genome and houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease, schizophrenia and Usher syndrome.

## REFERENCES

1. Eudy, J.D., et al. 1998. Isolation of a gene encoding a novel member of the nuclear receptor superfamily from the critical region of Usher syndrome type IIa at 1q41. *Genomics* 50: 382-384.
2. Lau, E.K., et al. 1999. Two novel polymorphic sequences in the glucocerebrosidase gene region enhance mutational screening and founder effect studies of patients with Gaucher disease. *Hum. Genet.* 104: 293-300.
3. Plasilova, M., et al. 2004. Exclusion of an extracolonic disease modifier locus on chromosome 1p33-36 in a large Swiss familial adenomatous polyposis kindred. *Eur. J. Hum. Genet.* 12: 365-371.
4. Oliveira, S.A., et al. 2005. Identification of risk and age-at-onset genes on chromosome 1p in Parkinson disease. *Am. J. Hum. Genet.* 77: 252-264.
5. Coute, Y., et al. 2008. ISG20L2, a novel vertebrate nucleolar exoribonuclease involved in ribosome biogenesis. *Mol. Cell. Proteomics* 7: 546-559.
6. Yokoi, T., et al. 2009. Analysis of the vitreous membrane in a case of type 1 Stickler syndrome. *Graefes Arch. Clin. Exp. Ophthalmol.* 247: 715-718.
7. Zhou, Z., et al. 2011. Antiviral activities of ISG20 in positive-strand RNA virus infections. *Virology* 409: 175-188.

## CHROMOSOMAL LOCATION

Genetic locus: ISG20L2 (human) mapping to 1q23.1; Isg20l2 (mouse) mapping to 3 F1.

## SOURCE

ISG20L2 (G-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ISG20L2 of human 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-164706 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

ISG20L2 (G-12) is recommended for detection of ISG20L2 of mouse, rat and human 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 ISG20L1.

ISG20L2 (G-12) is also recommended for detection of ISG20L2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ISG20L2 siRNA (h): sc-88462, ISG20L2 siRNA (m): sc-146297, ISG20L2 shRNA Plasmid (h): sc-88462-SH, ISG20L2 shRNA Plasmid (m): sc-146297-SH, ISG20L2 shRNA (h) Lentiviral Particles: sc-88462-V and ISG20L2 shRNA (m) Lentiviral Particles: sc-146297-V.

Molecular Weight of ISG20L2: 39 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](http://www.scbt.com) or our catalog for detailed protocols and support products.