

ISG20L1 (T-17): sc-243110

BACKGROUND

ISG20L1 (apoptosis enhancing nuclease), also known as AEN or pp12744, is a 325 amino acid protein that contains one exonuclease domain and shares significant homology with various exonucleases. Encoded by a gene that maps to human chromosome 15q26.1, ISG20L1 localizes predominantly to nucleolus where it translocates to nucleoplasm upon apoptosis induction. Up-regulated by p53 in response to ionizing radiation and DNA-damaging agents, ISG20L1 requires phosphorylation of p53 at 'Ser-15' for effective induction. ISG20L1 digests double-stranded DNA to form single-stranded DNA and amplifies DNA damage signals, thereby mediating and enhancing p53-induced apoptosis. Existing as two alternatively spliced isoforms, ISG20L1 exhibits exonuclease activity against single- and double-stranded DNA and RNA and also participates in nucleic acid binding.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Aen (mouse) mapping to 7 D3.

SOURCE

ISG20L1 (T-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ISG20L1 of mouse 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-243110 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ISG20L1 (T-17) is recommended for detection of ISG20L1 of mouse and 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 ISG20L2.

Suitable for use as control antibody for ISG20L1 siRNA (m): sc-146296, ISG20L1 shRNA Plasmid (m): sc-146296-SH and ISG20L1 shRNA (m) Lentiviral Particles: sc-146296-V.

Molecular Weight of ISG20L1: 36 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.