

ENDOD1 (G-1): sc-515153

BACKGROUND

ENDOD1 (endonuclease domain-containing 1 protein) is a 500 amino acid secreted protein that belongs to the DNA/RNA non-specific endonuclease family. ENDOD1 is thought to act as a DNase and an RNase. The gene that encodes ENDOD1 maps to human chromosome 11, which comprises approximately 4% of human genomic DNA and is considered a gene and disease association dense chromosome. The chromosome 11 encoded Atm gene is important for regulation of cell cycle arrest and apoptosis following double strand DNA breaks. Atm mutation leads to the disorder known as ataxia-telangiectasia. The blood disorders Sickle cell anemia and thalassemia are caused by HBB gene mutations, while Wilms' tumors, WAGR syndrome and Denys-Drash syndrome are associated with mutations of the WT1 gene. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are also associated with defects in chromosome 11-encoded genes.

REFERENCES

1. Fabiani, J.E., et al. 2000. Hereditary angioedema. Long-term follow-up of 88 patients. Experience of the Argentine Allergy and Immunology Institute. *Allergol. Immunopathol.* 28: 267-271.
2. Jira, P.E., et al. 2003. Smith-Lemli-Opitz syndrome and the DHCR7 gene. *Ann. Hum. Genet.* 67: 269-280.
3. Schuchman, E.H. 2007. The pathogenesis and treatment of acid sphingomyelinase-deficient Niemann-Pick disease. *J. Inherit. Metab. Dis.* 30: 654-663.
4. Siem, G., et al. 2008. Jervell and Lange-Nielsen syndrome in Norwegian children: aspects around cochlear implantation, hearing, and balance. *Ear Hear.* 29: 261-269.

CHROMOSOMAL LOCATION

Genetic locus: ENDOD1 (human) mapping to 11q21.

SOURCE

ENDOD1 (G-1) is a mouse monoclonal antibody raised against amino acids 29-212 mapping near the N-terminus of ENDOD1 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

ENDOD1 (G-1) is available conjugated to agarose (sc-515153 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515153 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515153 PE), fluorescein (sc-515153 FITC), Alexa Fluor® 488 (sc-515153 AF488), Alexa Fluor® 546 (sc-515153 AF546), Alexa Fluor® 594 (sc-515153 AF594) or Alexa Fluor® 647 (sc-515153 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515153 AF680) or Alexa Fluor® 790 (sc-515153 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

ENDOD1 (G-1) is recommended for detection of ENDOD1 of human origin by Western Blotting (starting dilution 1:100, 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 ENDOD1 siRNA (h): sc-96816, ENDOD1 shRNA Plasmid (h): sc-96816-SH and ENDOD1 shRNA (h) Lentiviral Particles: sc-96816-V.

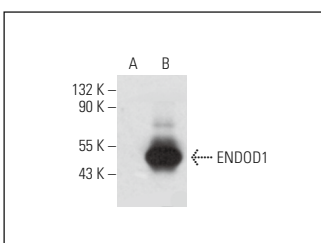
Molecular Weight of ENDOD1: 55 kDa.

Positive Controls: ENDOD1 (h): 293T Lysate: sc-117446 or RT-4 whole cell lysate: sc-364257.

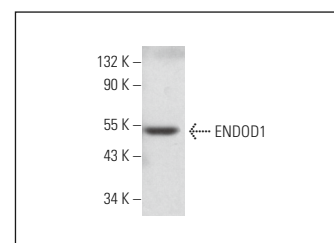
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



ENDOD1 (G-1): sc-515153. Western blot analysis of ENDOD1 expression in non-transfected: sc-117752 (A) and human ENDOD1 transfected: sc-117446 (B) 293T whole cell lysates.



ENDOD1 (G-1): sc-515153. Western blot analysis of ENDOD1 expression in RT-4 whole cell lysate.

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 for detailed protocols and support products.