

Polyserase-2 (C-15): sc-83005

BACKGROUND

Polyserase-2, also known as PRSS36, is an 855 amino acid secreted protein that localizes to the extracellular space and contains three peptidase S1 domains. Expressed in heart, liver, placenta, skeletal muscle and fetal kidney, Polyserase-2 functions as a serine protease that preferentially hydrolyzes the peptides N-t-Boc-Gln-Ala-Arg-AMC and N-t-Boc-Gln-Gly-Arg-AMC and is inhibited by 4-(2-aminoethyl)-benzenesulfonyl fluoride. Polyserase-2 is subject to post-translational N-glycosylation and is expressed in lung and colon adenocarcinomas, suggesting a role in tumor formation. The gene encoding Polyserase-2 maps to human chromosome 16, which encodes over 900 genes and comprises nearly 3% of the human genome.

REFERENCES

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2. Oh, J.H., Yang, J.O., Hahn, Y., Kim, M.R., Byun, S.S., Jeon, Y.J., Kim, J.M., Song, K.S., Noh, S.M., Kim, S., Yoo, H.S., Kim, Y.S. and Kim, N.S. 2005. Transcriptome analysis of human gastric cancer. *Mamm. Genome* 16: 942-954.
3. Cal, S., Peinado, J.R., Llamazares, M., Quesada, V., Moncada-Pazos, A., Garabaya, C. and López-Otín, C. 2006. Identification and characterization of human polyserase-3, a novel protein with tandem serine-protease domains in the same polypeptide chain. *BMC Biochem.* 7: 9.
4. Online Mendelian Inheritance in Man, OMIM™. 2006. Johns Hopkins University, Baltimore, MD. MIM Number: 610560. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
5. Cal, S., Moncada-Pazos, A. and Lopez-Otin, C. 2007. Expanding the complexity of the human degradome: polyserases and their tandem serine protease domains. *Front. Biosci.* 12: 4661-4669.

CHROMOSOMAL LOCATION

Genetic locus: PRSS36 (human) mapping to 16p11.2; Prss36 (mouse) mapping to 7 F3.

SOURCE

Polyserase-2 (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Polyserase-2 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-83005 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

Polyserase-2 (C-15) is recommended for detection of Polyserase-2 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 family members Polyserase-1 or Polyserase-3.

Polyserase-2 (C-15) is also recommended for detection of Polyserase-2 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for Polyserase-2 siRNA (h): sc-76197, Polyserase-2 siRNA (m): sc-76198, Polyserase-2 shRNA Plasmid (h): sc-76197-SH, Polyserase-2 shRNA Plasmid (m): sc-76198-SH, Polyserase-2 shRNA (h) Lentiviral Particles: sc-76197-V and Polyserase-2 shRNA (m) Lentiviral Particles: sc-76198-V.

Molecular Weight of unglycosylated Polyserase-2: 100 kDa.

Molecular Weight of glycosylated Polyserase-2: 130 kDa.

Positive Controls: SW480 cell lysate: sc-2219.

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.

PROTOCOLS

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