

SerpinB8 (Q-16): sc-83170

BACKGROUND

The serine proteinase inhibitors (serpins) comprise a superfamily of proteins with a diverse set of functions, including the control of blood coagulation, complement activation, programmed cell death and tissue development. SerpinB8 (serpin peptidase inhibitor, clade B (ovalbumin), member 8), also known as P18 or CAP2, is a 374 amino acid protein that localizes to the cytoplasm and belongs to the serine proteinase inhibitor family. Expressed at high levels in lung, liver, heart and skeletal muscle, SerpinB8, which exists as multiple alternatively spliced isoforms, is thought to play a role in platelet aggregation and platelet-regulated pathophysiological responses. The gene encoding SerpinB8 maps to a cluster of Serpin genes on human chromosome 18, which houses over 300 protein-coding genes and contains nearly 76 million bases.

REFERENCES

- Huber, R. and Carrell, R.W. 1989. Implications of the three-dimensional structure of α 1-antitrypsin for structure and function of serpins. *Biochemistry* 28: 8951-8966.
- Sprecher, C.A., Morgenstern, K.A., Mathewes, S., Dahlen, J.R., Schrader, S.K., Foster, D.C. and Kisiel, W. 1995. Molecular cloning, expression, and partial characterization of two novel members of the ovalbumin family of serine proteinase inhibitors. *J. Biol. Chem.* 270: 29854-29861.
- Bartuski, A.J., Kamachi, Y., Schick, C., Overhauser, J. and Silverman, G.A. 1997. Cytoplasmic antiproteinase 2 (PI8) and bomapin (PI10) map to the serpin cluster at 18q21.3. *Genomics.* 43: 321-328.
- Dahlen, J.R., Jean, F., Thomas, G., Foster, D.C. and Kisiel, W. 1998. Inhibition of soluble recombinant Furin by human proteinase inhibitor 8. *J. Biol. Chem.* 273: 1851-1854.
- Strik, M.C., Bladergroen, B.A., Wouters, D., Kisiel, W., Hooijberg, J.H., Verlaan, A.R., Hordijk, P.L., Schneider, P., Hack, C.E. and Kummer, J.A. 2002. Distribution of the human intracellular serpin protease inhibitor 8 in human tissues. *J. Histochem. Cytochem.* 50: 1443-1454.
- Online Mendelian Inheritance in Man, OMIM[™]. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 601697. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: SERPINB8 (human) mapping to 18q21.33; Serpinb8 (mouse) mapping to 1 E2.1.

SOURCE

SerpinB8 (Q-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SerpinB8 of human 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-83170 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

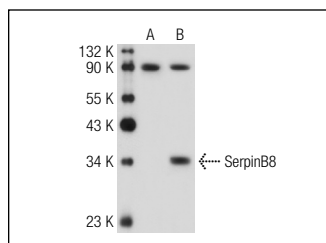
SerpinB8 (Q-16) is recommended for detection of SerpinB8 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other Serpin family members.

SerpinB8 (Q-16) is also recommended for detection of SerpinB8 in additional species, including porcine.

Suitable for use as control antibody for SerpinB8 siRNA (h): sc-76478, SerpinB8 siRNA (m): sc-76479, SerpinB8 shRNA Plasmid (h): sc-76478-SH, SerpinB8 shRNA Plasmid (m): sc-76479-SH, SerpinB8 shRNA (h) Lentiviral Particles: sc-76478-V and SerpinB8 shRNA (m) Lentiviral Particles: sc-76479-V.

Molecular Weight of SerpinB8: 42 kDa.

DATA



SerpinB8 (Q-16): sc-83170. Western blot analysis of SerpinB8 expression in non-transfected: sc-117752 (A) and human SerpinB8 transfected: sc-158952 (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 **SerpinB8 (PI-8): sc-101371**, our highly recommended monoclonal alternative to SerpinB8 (Q-16).