

# SerpinA3g (M-13): sc-169291

## BACKGROUND

The serine proteinase inhibitors (serpins) compose a superfamily of proteins with a diverse set of functions, including the control of blood coagulation, complement activation, programmed cell death and development. Serpins are secreted glycoproteins that contain a stretch of peptide that mimics a true substrate for a corresponding serine protease. SerpinA3g has an unusual reactive site Cys-Cys sequence, a unique C-terminal extension, but no usual cleavable N-terminal signal sequence. It localizes to the nucleus and is expressed at high levels in haemopoietic progenitors, and is down-regulated upon differentiation. This serpin is also dramatically up-regulated on T-cell activation as well as in macrophages during infection with *Salmonella typhimurium* and *Listeria monocytogenes*. SerpinA3g is activated by IFN- $\gamma$  and NF $\kappa$ B, and it may mediate its biological effects via interaction with non-protease intracellular targets.

## REFERENCES

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- Silverman, G.A., et al. 2004. Human clade B serpins (ov-serpins) belong to a cohort of evolutionarily dispersed intracellular proteinase inhibitor clades that protect cells from promiscuous proteolysis. *Cell. Mol. Life Sci.* 61: 301-325.

## CHROMOSOMAL LOCATION

Genetic locus: Serpina3g (mouse) mapping to 12 E.

## SOURCE

SerpinA3g (M-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of SerpinA3g of mouse origin.

## RESEARCH USE

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

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-169291 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

SerpinA3g (M-13) is recommended for detection of SerpinA3g 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 other SerpinA3 family members.

Suitable for use as control antibody for SerpinA3g siRNA (m): sc-153360, SerpinA3g shRNA Plasmid (m): sc-153360-SH and SerpinA3g shRNA (m) Lentiviral Particles: sc-153360-V.

Molecular Weight of SerpinA3g: 49 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.