SANTA CRUZ BIOTECHNOLOGY, INC.

GPVI (N-20): sc-23551



BACKGROUND

CD32 (also designated Fc γ RII) is a low affinity receptor for the Fc fragment of aggregated IgG. CD32 is responsible for the clearance of immunocomplexes by macrophages and also plays an important role in the regulation of antibody production by B cells. A member of the immunoglobulin superfamily, glycoprotein VI (GPVI) is a collagen receptor that plays a critical role in collageninduced platelet aggregation. Patients who are deficient in GPVI suffer from bleeding disorders, and GPVI may be involved with cardiovascular and cerebral vascular diseases. GPVI also binds the collagen related peptide (CRP) and convulxin (Cvx), a GPVI-specific ligand from snake venom. GPVI mediates its signal through CD32, which in response to Cvx, leads to tyrosine phosphorylation and activation of Syk and PLC γ 2. The gene encoding human GPVI maps to chromosome 19q13 and produces three isoforms, full length GPVI-1 and two additional isoforms, GPVI-2 and GPVI-3.

REFERENCES

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- Ezumi, Y., et al. 2000. Molecular cloning, genomic structure, chromosomal localization, and alternative splice forms of the platelet collagen receptor glycoprotein VI. Biochem. Biophys. Res. Commun. 277: 27-36.
- Jandrot-Perrus, M., et al. 2000. Cloning, characterization, and functional studies of human and mouse glycoprotein VI: a platelet-specific collagen receptor from the immunoglobulin superfamily. Blood 96: 1798-1807.
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CHROMOSOMAL LOCATION

Genetic locus: GP6 (human) mapping to 19q13.4; Gp6 (mouse) mapping to 7 A1.

SOURCE

GPVI (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of GPVI 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-23551 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GPVI (N-20) is recommended for detection of GPVI of 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).

Suitable for use as control antibody for GPVI siRNA (h): sc-43813, GPVI shRNA Plasmid (h): sc-43813-SH and GPVI shRNA (h) Lentiviral Particles: sc-43813-V.

Molecular Weight of GPVI: 70 kDa.

Positive Controls: MEG-01 cell lysate: sc-2283 or Jurkat whole cell lysate: sc-2204.

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) Immunofluo-rescence: use donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

STORAGE

Store at 4° C, **D0 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 Satisfation Guaranteed

Try **GPVI (H-5): sc-390410**, our highly recommended monoclonal alternative to GPVI (N-20).