SANTA CRUZ BIOTECHNOLOGY, INC.

WARP (P-13): sc-162391

BACKGROUND

Von Willebrand disease is a congenital bleeding disorder caused by defects in the von Willebrand factor protein (VWF). VWF is a multimeric glycoprotein that is found in endothelial cells, plasma and platelets, and is involved in the coagulation of blood at injury sites. VWF acts as a carrier protein for Factor VIII, a cofactor required for coagulation, and it promotes platelet adhesion and aggregation. Large multimers of VWF are more biologically active, and bind platelets and the subendothelial matrix more efficiently. The accumulation of large VWF multimers in circulation can lead to platelet aggregation and cause life-threatening disorders. WARP (von Willebrand factor A domain-related protein), also designated VWA1 (von Willebrand factor A domain containing 1), is a 445 amino acid secreted protein expressed in chondrocytes that consists of 2 fibronectin type-III domains and one VWFA domain. Belonging to the von Willebrand factor A (VA) domain superfamily of extracellular matrix proteins, WARP may participate in cartilage structure and function. WARP may exist as a homodimer or homomultimer and may be expressed as two alternatively spliced variants.

REFERENCES

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2. Fitzgerald, J. and Bateman, J.F. 2003. Is there an evolutionary relationship between WARP (von Willebrand factor A-domain-related protein) and the FACIT and FACIT-like collagens? FEBS Lett. 552: 91-94.
3. Sutherland, J.J., et al. 2004. Molecular modeling of the von Willebrand factor A2 domain and the effects of associated type 2A von Willebrand disease mutations. J. Mol. Model 10: 259-270.
4. Li, F., et al. 2004. Plasmodium ookinete-secreted proteins secreted through a common micronemal pathway are targets of blocking malaria transmission. J. Biol. Chem. 279: 26635-26644.
5. Hassenpflug, W.A., et al. 2006. Impact of mutations in the von Willebrand factor A2 domain on ADAMTS13-dependent proteolysis. Blood 107: 2339-2345.
6. Allen, J.M., et al. 2006. WARP is a novel multimeric component of the chondrocyte pericellular matrix that interacts with perlecan. J. Biol. Chem. 281: 7341-7349.
7. Auton, M., et al. 2007. Conformational stability and domain unfolding of the Von Willebrand factor A domains. J. Mol. Biol. 366: 986-1000.
8. Allen, J.M., et al. 2008. The extracellular matrix protein WARP is a novel component of a distinct subset of basement membranes. Matrix Biol. 27: 295-305.
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CHROMOSOMAL LOCATION

Genetic locus: VWA1 (human) mapping to 1p36.33; Vwa1 (mouse) mapping to 4 E2.

SOURCE

WARP (P-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of WARP 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-162391 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

WARP (P-13) is recommended for detection of WARP 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).

WARP (P-13) is also recommended for detection of WARP in additional species, including bovine, porcine and avian.

Suitable for use as control antibody for WARP siRNA (h): sc-78614, WARP siRNA (m): sc-155240, WARP shRNA Plasmid (h): sc-78614-SH, WARP shRNA Plasmid (m): sc-155240-SH, WARP shRNA (h) Lentiviral Particles: sc-78614-V and WARP shRNA (m) Lentiviral Particles: sc-155240-V.

Molecular Weight of WARP: 45 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.

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.