

# hemicentin-2 (N-20): sc-247129

## BACKGROUND

First discovered in *C. elegans*, Hemicentins are extracellular matrix (ECM) proteins that contain a single von Willebrand A domain at the amino terminus, more than 40 tandem immunoglobulin domains, multiple tandem epidermal growth factors, and a single fibulin-like carboxy-terminal module. In mammals, Hemicentins are expressed in the ECM of eye, skin and tongue epithelium and in the ECM of some blood vessels. Due to the expression pattern in areas that are subject to a significant amount of stress, it is thought that Hemicentins likely play a role in the architecture of flexible and adhesive cell junctions. Hemicentin-2 is a 5,065 amino acid secreted protein that is expressed in the extracellular matrix. There are three isoforms of Hemicentin-2 that are produced as a result of alternative splicing events.

## REFERENCES

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3. Schultz, D.W., et al. 2003. Analysis of the ARMD1 locus: evidence that a mutation in HEMICENTIN-1 is associated with age-related macular degeneration in a large family. *Hum. Mol. Genet.* 12: 3315-3323.
4. Schultz, D.W., et al. 2005. HEMICENTIN-1 (FIBULIN-6) and the 1q31 AMD locus in the context of complex disease: review and perspective. *Ophthalmic Genet.* 26: 101-105.
5. Bojanowski, C.M., et al. 2005. Analysis of Hemicentin-1, hOgg1, and E-selectin single nucleotide polymorphisms in age-related macular degeneration. *Trans Am Ophthalmol Soc.* 103: 37-44; discussion 44.
6. Dong, C., et al. 2006. Hemicentin assembly in the extracellular matrix is mediated by distinct structural modules. *J. Biol. Chem.* 281: 23606-23610.
7. Thompson, C.L., et al. 2007. Complement factor H and hemicentin-1 in age-related macular degeneration and renal phenotypes. *Hum. Mol. Genet.* 16: 2135-2148.
8. Fisher, S.A., et al. 2007. Case-control genetic association study of fibulin-6 (FBLN6 or HMCN1) variants in age-related macular degeneration (AMD). *Hum. Mutat.* 28: 406-413.
9. Xu, X., et al. 2007. Hemicentins assemble on diverse epithelia in the mouse. *J. Histochem. Cytochem.* 55: 119-126.

## CHROMOSOMAL LOCATION

Genetic locus: HMCN2 (human) mapping to 9q34.11.

## SOURCE

hemicentin-2 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of hemicentin-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-247129 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

hemicentin-2 (N-20) is recommended for detection of hemicentin-2 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); non cross-reactive with hemicentin-1.

Suitable for use as control antibody for hemicentin-2 siRNA (h): sc-92917, hemicentin-2 shRNA Plasmid (h): sc-92917-SH and hemicentin-2 shRNA (h) Lentiviral Particles: sc-92917-V.

Molecular Weight of hemicentin-2: 543/448/474 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](http://www.scbt.com) or our catalog for detailed protocols and support products.