

Kindlin-3 (N-12): sc-133428

BACKGROUND

Kindlin-3, also known as FERMT3 (fermitin family homolog 3), URP2, KIND3, MIG-2, MIG2B or URP2, is a 667 amino acid protein that localizes to both the cell membrane and the cytoplasm and contains one PH domain and one FERM domain. Expressed at high levels in lymph node tissue and at lower levels in spleen, thymus, stomach, placenta, lung, testis and small intestine, Kindlin-3 is thought to be involved in cell adhesion events and may play a role in apoptosis. Kindlin-3 is overexpressed in B-cell malignancies, suggesting that, via its ability to affect cell adhesion, Kindlin-3 may participate in tumor transformation and metastasis. Two isoforms of Kindlin-3, designated short and long, exist due to alternative splicing events.

REFERENCES

1. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 607901. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
2. Siegel, D.H., et al. 2003. Loss of Kindlin-1, a human homolog of the *Caenorhabditis elegans* actin-extracellular-matrix linker protein UNC-112, causes Kindler syndrome. *Am. J. Hum. Genet.* 73: 174-187.
3. Weinstein, E.J., et al. 2003. URP1: a member of a novel family of PH and FERM domain-containing membrane-associated proteins is significantly over-expressed in lung and colon carcinomas. *Biochim. Biophys. Acta* 1637: 207-216.
4. Boyd, R.S., et al. 2003. Proteomic analysis of the cell-surface membrane in chronic lymphocytic leukemia: identification of two novel proteins, BCNP1 and MIG2B. *Leukemia* 17: 1605-1612.
5. Rikova, K., et al. 2007. Global survey of phosphotyrosine signaling identifies oncogenic kinases in lung cancer. *Cell* 131: 1190-1203.
6. Wang, L., et al. 2008. URP2SF, a FERM and PH domain containing protein, regulates NFκB and apoptosis. *Biochem. Biophys. Res. Commun.* 368: 899-906.
7. Moser, M., et al. 2008. Kindlin-3 is essential for integrin activation and platelet aggregation. *Nat. Med.* 14: 325-330.

CHROMOSOMAL LOCATION

Genetic locus: FERMT3 (human) mapping to 11q13.1; Fermt3 (mouse) mapping to 19 A.

SOURCE

Kindlin-3 (N-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of Kindlin-3 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-133428 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Kindlin-3 (N-12) is recommended for detection of Kindlin-3 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with Kindlin-1.

Kindlin-3 (N-12) is also recommended for detection of Kindlin-3 in additional species, including porcine.

Suitable for use as control antibody for Kindlin-3 siRNA (h): sc-96761, Kindlin-3 siRNA (m): sc-146483, Kindlin-3 shRNA Plasmid (h): sc-96761-SH, Kindlin-3 shRNA Plasmid (m): sc-146483-SH, Kindlin-3 shRNA (h) Lentiviral Particles: sc-96761-V and Kindlin-3 shRNA (m) Lentiviral Particles: sc-146483-V.

Molecular Weight of Kindlin-3: 76 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (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.