

#2391 Store at -20°C

Wnt3a Antibody

✓ 100 µl
(10 western blots)

Orders ■ 877-616-CELL (2355)
orders@cellsignal.com
Support ■ 877-678-TECH (8324)
info@cellsignal.com
Web ■ www.cellsignal.com

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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Entrez-Gene ID #89780
Swiss-Prot Acc. #P56704

| Applications | Species Cross-Reactivity* | Molecular Wt. | Source |
|---------------|---------------------------|---------------|----------|
| W Transfected | M, (H) | 42 kDa | Rabbit** |

Background: The Wnt family includes several secreted glycoproteins that play important roles in animal development (1). There are 19 Wnt genes in the human genome that encode functionally distinct Wnt proteins (2). Wnt members bind to the Frizzled family of seven-pass transmembrane proteins and activate several signaling pathways (3). The canonical Wnt/ β -catenin pathway also requires a coreceptor from the low-density lipoprotein receptor family (4). Aberrant activation of Wnt signaling pathways is involved in several types of cancers (5).

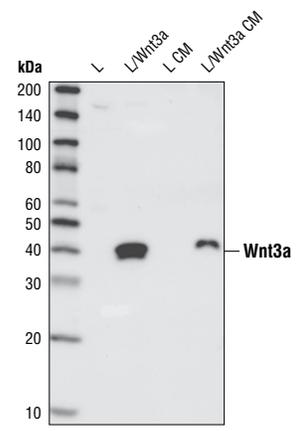
Wnt3a protein is palmitoylated and can function as a growth factor for hematopoietic stem cells (6). Although functionally distinct, Wnt3a shows high homology to Wnt3 (7).

Specificity/Sensitivity: Wnt3a antibody detects transfected Wnt3a protein in L cells and the conditioned medium from L/Wnt3a cells. Based on homology, it is expected to also recognize Wnt3.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Asp294 of human Wnt3a. Antibodies are purified by protein A and peptide affinity chromatography.

Background References:

- (1) Cadigan, K.M. and Nusse, R. (1997) *Genes Dev.* 11, 3286-3305.
- (2) Moon, R.T. et al. (1997) *Trends Genet.* 13, 157-162.
- (3) Kohn, A.D. and Moon, R.T. (2004) *Cell Calcium* 38, 439-446.
- (4) Logan, C.Y. and Nusse, R. (2004) *Annu. Rev. Cell Dev. Biol.* 20, 781-810.
- (5) Giles, R.H. et al. (2003) *Biochim. Biophys. Acta.* 1653, 1-24.
- (6) Willert, K. et al. (2003) *Nature* 423, 448-52.
- (7) Katoh, M. (2001) *Int. J. Oncol.* 19, 977-82.



Western blot analysis of total cell lysates and conditioned medium (CM) from L cells overexpressing mouse Wnt3a, compared with parental L cells, using Wnt3a antibody.

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

*Species cross-reactivity is determined by western blot.

**Anti-rabbit secondary antibodies must be used to detect this antibody.

Recommended Antibody Dilutions:

Western blotting 1:1000

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide
Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine
Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.