

#2392 Store at -20°C

Wnt5a Antibody

✓ 100 µl
(10 western blots)

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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 #7474
Swiss-Prot Acc. #P41221

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W Transfected	M, (H)	45 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).

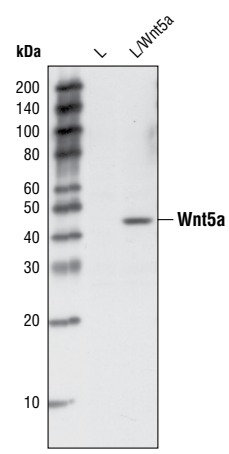
Wnt-5a has been shown to signal through the canonical Wnt pathways as well as through non-canonical pathways and is up-regulated in various types of human cancers (6-8). In melanoma, Wnt5a is thought to directly affect cell motility and metastasis (9).

Specificity/Sensitivity: Wnt5a Antibody detects transfected Wnt5a protein in L cells.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Leu270 of human Wnt5a. 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) Mikels, A.J. and Nusse, R. (2006) *PLoS Biol.* 4, e115.
- (7) Katoh, M. and Katoh, M. (2007) *Int J Mol Med* 19, 273-278.
- (8) Katoh, M. (2005) *Oncol. Rep.* 14, 1583-1588.
- (9) Weeraratna, A.T. et al. (2002) *Cancer Cell* 1, 279-288.



Western blot analysis of total cell extracts from L cells overexpressing mouse Wnt5a cells compared to parental L cells, using Wnt5a 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.