

#4611 Store at -20°C

Dysbindin 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 #84062
Swiss-Prot Acc. #Q96EV8

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W Endogenous	H	50 kDa	Rabbit**

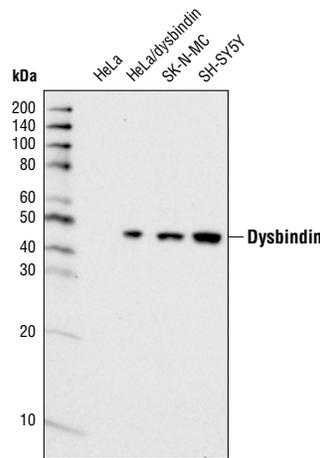
Background: Dysbindin, or dystrobrevin-binding protein 1, is a coiled-coil-containing protein expressed in muscle and brain that was identified as a binding partner of dystrobrevin (1). Dysbindin upregulates expression of the pre-synaptic proteins SNAP25 and synapsin I, thereby increasing glutamate release and promoting neuronal viability through Akt signaling. In particular, Akt phosphorylation is suppressed with downregulation of dysbindin and increased with upregulation of dysbindin (2). A nonsense mutation of dysbindin causes Hermansky-Pudlak disease, an autosomal recessive disorder characterized by lysosomal storage defects and prolonged bleeding. (2). Genetic variation in the gene encoding dysbindin is strongly associated with schizophrenia and protein levels are reduced in the prefrontal cortex, midbrain and hippocampus of brains from patients with schizophrenia (3,4).

Specificity/Sensitivity: Dysbindin Antibody detects endogenous levels of total dysbindin protein.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to human dysbindin. Antibodies are purified by peptide affinity chromatography.

Background References:

- (1) Benson, M.A. et al. (2001) *J Biol Chem* 276, 24232–41.
- (2) Numakawa, T. et al. (2004) *Hum Mol Genet* 13, 2699–708.
- (3) Straub, R.E. et al. (2002) *Am J Hum Genet* 71, 337–48.
- (4) Talbot, K. et al. (2004) *J Clin Invest* 113, 1353–63.



Western blot analysis of HeLa cells, untransfected or transfected with a construct overexpressing dysbindin, and other cell lines using Dysbindin 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 BSA, 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.