

Drebrin A Antibody

✓ 100 µl
(10 western blots)



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New 09/12

For Research Use Only. Not For Use In Diagnostic Procedures.

Applications W, IP Endogenous	Species Cross-Reactivity* H, M, R, Mk	Molecular Wt. 132 kDa	Source Rabbit**
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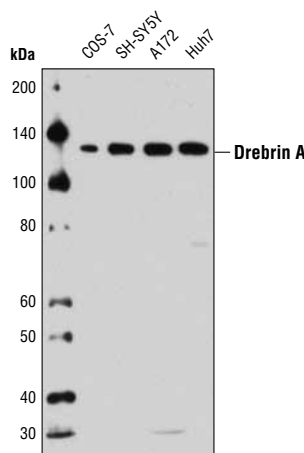
Background: Developmentally-regulated brain proteins (Drebrins) are cytoplasmic proteins that were originally identified in the brain as F-actin-binding proteins. There are two mammalian isoforms: adult type (A) and embryonic type (E). These isoforms are derived from a single gene through alternative RNA splicing mechanisms (1). Drebrin E has been observed to accumulate in the developmental stage of migrating neurons and in the growing cell processes of neurons. Drebrin A is found at the dendritic spines of mature cortical neurons where it plays a role in synaptic plasticity (2,3). Although drebrins are primarily found in neurons, they have also been found in skeletal muscle, heart, pancreas, and kidney. Research studies have shown that reduced expression of drebrin in the brain could be associated with Alzheimer's Disease, Down Syndrome (4), and bipolar disorders (5).

Specificity/Sensitivity: Drebrin A Antibody recognizes endogenous levels of total Drebrin A protein. This antibody does not cross-react with Drebrin E.

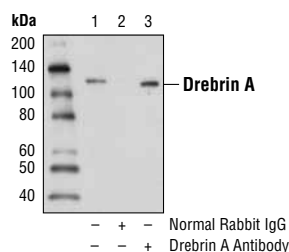
Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ala330 of mouse Drebrin A protein. Antibodies are purified by protein A and peptide affinity chromatography.

Background References:

- (1) Kojima, N. et al. (1993) *Brain Res Mol Brain Res* 19, 101-14.
- (2) Shirao, T. (1995) *J Biochem* 117, 231-6.
- (3) Ivanov, A. et al. (2009) *J Cell Sci* 122, 524-34.
- (4) Shim, K.S. and Lubec, G. (2002) *Neurosci Lett* 324, 209-12.
- (5) Kim, H.W. et al. (2010) *Neurobiol Dis* 37, 596-603.



Western blot analysis of extracts from various cell lines using Drebrin A Antibody.



Immunoprecipitation of Drebrin A from SH-SY5Y cell extracts, using Normal Rabbit IgG #2729 (lane 2) or Drebrin A Antibody (lane 3). Lane 1 is 10% input. Western blot analysis was performed using Drebrin A Antibody.

Entrez-Gene ID #1627
Swiss-Prot Acc. #Q16643

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
Immunoprecipitation 1:50

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

Please visit www.cellsignaling.com for a complete listing of recommended complementary 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.