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#5052

Drebrin (pan) Antibody

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H M R Mk	Endogenous	110-132	Rabbit	#Q16643	1627

Product Usage Information

Application

Western Blotting

Dilution

1:1000

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.

Specificity/Sensitivity

Drebrin (pan) Antibody recognizes endogenous levels of total DrebrinE and DrebrinA proteins.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Leu580 of human Drebrin protein. Antibodies are purified by protein A and peptide affinity chromatography.

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).

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.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

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

Applications Key

W: Western Blotting

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat **Mk:** Monkey

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