



Anti-VAPB Antibody

Alternative Names: ALS8, VAMP-B, VAP-B, Vesicle-associated membrane protein-associated protein B/C

Catalogue Number: AB19-10107-50ug

Size: 50 µg

Background Information

Vesicle-associated membrane protein-associated protein B (VAPB) interacts with lipid-binding proteins that have a FFAT motif (a short motif containing two phenylalanines in an acidic tract). This targets it to the cytosolic surface of the endoplasmic reticulum. It is found as a homodimer and as a heterodimer with VAPA and is believed to be involved in vesicle trafficking. VAPB is abundant in motor neurons and a mutation in the conserved major sperm protein homology domain of VAPB has been linked to motor-neuron degeneration in amyotrophic lateral sclerosis (ALS) through aggregation of mutant VAPB in tubular ER clusters, which interferes with its FFAT-motif binding, and traps VAP in mutant aggregates.

VAPB is also linked to the mitochondrial membrane protein, protein tyrosine phosphatase interacting protein-51 (PTPIP51) with both proteins with the pair acting as a tether between regions of ER to the mitochondrial surface. Disruption of the interaction of VAPB and PTPIP51 is linked to the pathogenic process in Parkinson's disease, fronto-temporal dementia (FTD) and related amyotrophic lateral sclerosis (ALS).

Product Information

Antibody Type:	Polyclonal	Host:	Rabbit
Isotype:	IgG	Species Reactivity:	Human, Mouse
Immunogen:	Near full length recombinant human VAPB		
Format:	50 µg in 50 µl PBS with 0.02% sodium azide, 50% glycerol, pH7.3.		
Storage Conditions:	Store at -20°C. Avoid freeze / thaw cycles.		
Applications:	WB IHC IF WB 1:500-2000. IHC 1:50-200. IF 1:20-50.		

Additional Information

Subcellular location:	Endoplasmic reticulum membrane, Single-pass type IV membrane protein	MW:	27kDa (Intended as a general guide and does not allow for all isoforms and species variations)
Gene ID	9217	Uniprot ID:	O95292



References

[1] Gómez-Suaga, P., Pérez-Nievas, B.G., Glennon, E.B. et al. The VAPB-PTPIP51 endoplasmic reticulum-mitochondria tethering proteins are present in neuronal synapses and regulate synaptic activity. *acta neuropathol commun* 7, 35 (2019)
doi:10.1186/s40478-019-0688-4