Anti-UBA1 Antibody

Alternative Names:	A1S9, A1ST, GXP1, UBE1, A1S9T, AMCX1, POC20, SMAX2, UBA1A, UBE1X, CFAP124, Ubiquitin Like Modifier Activating Enzyme, Ubiquitin-Activating Enzyme E1, A1S9T And BN75 Temperature Sensitivity Complementing, Ubiquitin-Activating Enzyme E1 Homolog, Testicular
Catalogue Number:	AB19-10122-50ug
Size:	50 µg

Background Information

Ubiquitin-like modifier-activating enzyme 1 (UBA1) is a multidomain enzyme and regulator of the ubiquitin proteasome system (UPS). It effectively marks proteins for degradation by the proteasome, acting as a gatekeeper of the Ub conjugation cascade by activating ubiquitin in a two-step process involving adenylation and thioester bond formation followed by transfer of ubiquitin to Cdc34 (an E2 ubiquitin-conjugating enzyme). Mutations in the ubiquitin-like modifier activating enzyme 1 gene (UBA1), leading to reduced UBA1 expression, cause a rare form of Spinal Muscular Atrophy (SMA) known as X-linked SMA (XL-SMA). Aminoacyl-tRNA synthetases, including GARS (Glycyl-tRNA synthetase), havebeen identified as downstream targets of UBA1. Dysregulation of UBA1/GARS pathways in spinal muscular atrophy results in a similar phenotype to GARS-dependent defects (such as Charcot-Marie-Tooth disease), perhaps indicating significant molecular and phenotypic overlap between spinal muscular atrophy and Charcot-Marie-Tooth disease.

Product Information

Antibody Type:	Polyclonal	Host:	Rabbit	
Isotype:	lgG	Species Reactivity:	Human, Mouse, Rat	
Immunogen: Format: Storage Conditions: Applications:	A synthetic peptide from human UBA1 50 μg in 50 μl PBS with 0.03% Proclin300, 50% glycerol, pH7.3. Store at -20°C. Avoid freeze / thaw cycles. WB IHC WB 1:500-2000. IHC 1:30-150.			
Additional Information Subcellular location:	Nucleus, Mitochondrion	MW:	118 kDa (Intended as a general guide and does not allow for all isoforms and species variations)	
Gene ID	7317	Uniprot ID:	P22314	

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