



Anti-USP10 Antibody

Alternative Names: UBPO, Deubiquitinating enzyme 10, Ubiquitin thioesterase 10, Ubiquitin-specific-processing protease 10, Ubiquitin carboxyl-terminal hydrolase 10, Ubiquitin Specific Peptidase 10, Ubiquitin Specific Protease 10, EC 3.4.19.12, KIAA0190, UBPO

Catalogue Number: AB19-10115-100ug

Size: 100 µg

Background Information

Ubiquitin-specific protease 10 (USP10) is a deubiquitinase that is ubiquitously expressed in many cell types. Substrates of USP10 deubiquitinase include stress regulators, tumor suppressor p53, sirtuin6 and adenosine monophosphate-activated protein kinase. USP10 also has deubiquitinase-independent functions, inhibiting apoptosis by reducing reactive oxygen species (ROS) production induced by an oxidative stress inducer, suggesting that USP10 is a critical stress-protective factor under various stress conditions. USP10 promotes the formation of both stress granules (SGs) and aggresomes and localises in SGs in cultured cells treated with SG stimulators by directly interacting with the SG-initiation protein G3BP. Depletion of USP10 partially reduces the formation of SGs and also reduces aggresome formation in cells treated with a proteasome inhibitor. Additionally through inducing aggresome formation, USP10 increases the aggregation of several pathogenic proteins such as α -synuclein and Tau suggesting that USP10 may play a key role in the initiation of pathogenic Tau aggregation in Alzheimer's disease (AD), through SG formation.

Product Information

Antibody Type:	Polyclonal	Host:	Rabbit
IsoType:	IgG	Species Reactivity:	Human, Mouse
Immunogen:	Partial length recombinant human USP10 from the C-terminal region		
Format:	100 µg in 100 µl PBS with 0.02% sodium azide, 50% glycerol, pH7.3.		
Storage Conditions:	Store at -20°C. Avoid freeze / thaw cycles.		
Applications:	WB IF - WB 1:500-2000. IF 1:50-200.		

Additional Information

Subcellular location:	Cytoplasm, Early endosome, Nucleus	MW:	87kDa (Intended as a general guide and does not allow for all isoforms and species variations)
Gene ID	9100	Uniprot ID:	Q14694