

## ARG54950 anti-USP25 antibody

Package: 50 µg  
Store at: -20°C

### Summary

Product Description	Rabbit Polyclonal antibody recognizes USP25
Tested Reactivity	Hu, Ms
Tested Application	ELISA, ICC/IF, IHC-P, WB
Specificity	USP25 antibody is human and mouse reactive. Multiple isoforms of USP25 are known to exist.
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	USP25
Species	Human
Immunogen	Synthetic peptide (17 aa) within aa. 470-520 of Human USP25.
Conjugation	Un-conjugated
Alternate Names	USP on chromosome 21; Ubiquitin-specific-processing protease 25; Ubiquitin carboxyl-terminal hydrolase 25; Deubiquitinating enzyme 25; Ubiquitin thioesterase 25; USP21; EC 3.4.19.12

### Application Instructions

Application table	Application	Dilution
	ELISA	Assay-dependent
	ICC/IF	20 µg/ml
	IHC-P	5 µg/ml
	WB	1 - 2 µg/ml
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	Mouse Brain Tissue Lysate	

### Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS and 0.02% Sodium azide
Preservative	0.02% Sodium azide
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated

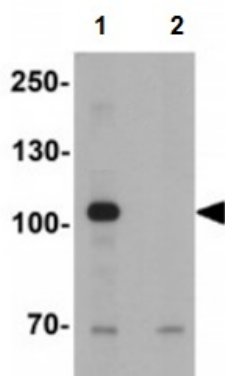
freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

**Note** For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

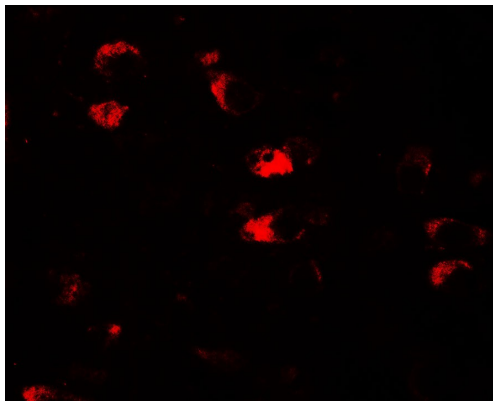
Database links	<a href="#">GeneID: 29761 Human</a> <a href="#">GeneID: 30940 Mouse</a> <a href="#">Swiss-port # P57080 Mouse</a> <a href="#">Swiss-port # Q9UHP3 Human</a>
Gene Symbol	USP25
Gene Full Name	ubiquitin specific peptidase 25
Background	USP25 (ubiquitin specific peptidase 25), also known as USP21, belongs to the peptidase C19 family and is a highly conserved 76-amino acid protein involved in regulation of intracellular protein breakdown, cell cycle regulation, and stress response. It contains one UBA-like domain and two UIM (ubiquitin-interacting motif) repeats. Due to alternative splicing events, USP25 is expressed as two short, ubiquitously expressed isoforms and one long, muscle-specific isoform. The long isoform of USP25 (USP25m) is upregulated in myogenesis and is implicated in regulation of muscular differentiation and function. USP25 is a deubiquitinating enzyme (DUB) that negatively regulates IL-17-triggered signaling.
Function	Deubiquitinating enzyme that hydrolyzes ubiquitin moieties conjugated to substrates and thus, functions to process newly synthesized Ubiquitin, to recycle ubiquitin molecules or to edit polyubiquitin chains and prevents proteasomal degradation of substrates. Hydrolyzes both 'Lys-48'- and 'Lys-63'-linked tetraubiquitin chains. The muscle-specific isoform (USP25m) may have a role in the regulation of muscular differentiation and function. [UniProt]
Research Area	Cell Biology and Cellular Response antibody; Gene Regulation antibody
Calculated Mw	122 kDa
PTM	Acetylated. Sumoylation impairs binding to and hydrolysis of ubiquitin chains. Sumoylated preferentially with SUMO2 or SUMO3. Desumoylated by SENP1. Regulated by ubiquitination on the same residue. Preferentially monoubiquitinated but can also be polyubiquitinated. Autodeubiquitinated. Ubiquitination activates the enzymatic activity either by preventing sumoylation or by allowing novel interactions. Phosphorylation in the C-terminal by SYK regulates USP25 cellular levels.

## Images



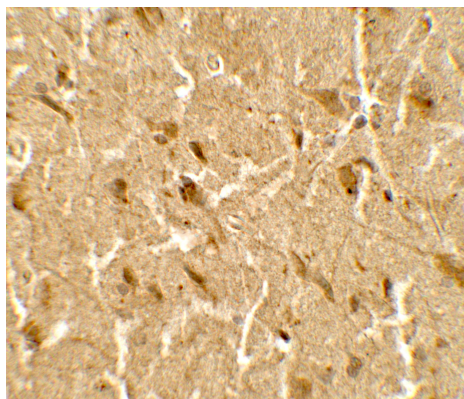
ARG54950 anti-USP25 antibody WB image

Western blot: mouse brain tissue lysate stained with ARG54950 anti-USP25 antibody at 1 ug/ml dilution in (Lane 1) the absence and (Lane 2) the presence of blocking peptide.



ARG54950 anti-USP25 antibody IHC image

Immunohistochemistry: USP25 in human brain tissue stained with ARG54950 anti-USP25 antibody at 20 µg/ml dilution.



ARG54950 anti-USP25 antibody IHC image

Immunohistochemistry: USP25 in human brain tissue stained with ARG54950 anti-USP25 antibody at 5 µg/ml dilution.