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# UBA6 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AW5631

## Product Information

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|---|---|
| **Application** | WB |
| **Primary Accession** | A0AVT1 |
| **Other Accession** | Q8C7R4 |
| **Reactivity** | Human, Mouse |
| **Predicted** | Dog |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 117970 |
| **Isotype** | Rabbit IgG |
| **Antigen Source** | HUMAN |

## Additional Information

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| **Gene ID** | 55236 |
| **Antigen Region** | 861-889 |
| **Other Names** | Ubiquitin-like modifier-activating enzyme 6, Ubiquitin-activating enzyme 6, Monocyte protein 4, MOP-4, Ubiquitin-activating enzyme E1-like protein 2, E1-L2, UBA6, MOP4, UBE1L2 |
| **Dilution** | WB~~0.25 |
| **Target/Specificity** | This UBA6 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 861-889 amino acids from the C-terminal region of human UBA6. |
| **Format** | Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification. |
| **Storage** | Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles. |
| **Precautions** | UBA6 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **Name** | UBA6 |

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| **Synonyms** | MOP4, UBE1L2 |
| **Function** | Activates ubiquitin by first adenylating its C-terminal glycine residue with ATP, and thereafter linking this residue to the side chain of a cysteine residue in E1, yielding a ubiquitin-E1 thioester and free AMP (PubMed:35970836, PubMed:35986001). Specific for ubiquitin, does not activate ubiquitin-like peptides. Also activates UBD/FAT10 conjugation via adenylation of its C-terminal glycine (PubMed:17889673, PubMed:35970836, PubMed:35986001). Differs from UBE1 in its specificity for substrate E2 charging. Does not charge cell cycle E2s, such as CDC34. Essential for embryonic development. Isoform 2 may play a key role in ubiquitin system and may influence spermatogenesis and male fertility. |
| **Tissue Location** | Widely expressed. Isoform 2 is predominantly expressed in testis with higher expression in adult testis than in fetal testis. |

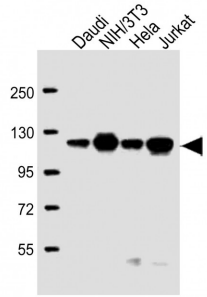
## Background

Modification of proteins with ubiquitin (UBB; MIM 191339) or ubiquitin-like proteins controls many signaling networks and requires a ubiquitin-activating enzyme (E1), a ubiquitin conjugating enzyme (E2), and a ubiquitin protein ligase (E3). UBE1L2 is an E1 enzyme that initiates the activation and conjugation of ubiquitin-like proteins (Jin et al., 2007 [PubMed 17597759]).

## References


Groettrup, M., et al. Trends Biochem. Sci. 33(5):230-237(2008)
Chiu, Y.H., et al. Mol. Cell 27(6):1014-1023(2007)
Pelzer, C., et al. J. Biol. Chem. 282(32):23010-23014(2007)
Jin, J., et al. Nature 447(7148):1135-1138(2007)
Hillier, L.W., et al. Nature 434(7034):724-731(2005)


## Images




All lanes : Anti-UBA6 Antibody (C-term) at 1:2000 dilution Lane 1: Daudi whole cell lysate Lane 2: NIH/3T3 whole cell lysate Lane 3: Hela whole cell lysate Lane 4: Jurkat whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 118 kDa Blocking/Dilution buffer: 5% NFDM/TBST.