

RWDD3 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP9363b**Specification**

RWDD3 Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [Q9Y3V2](#)**RWDD3 Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 25950**Other Names**

RWD domain-containing protein 3, RWD domain-containing sumoylation enhancer, RSUME, RWDD3, RSUME

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

RWDD3 Antibody (C-term) Blocking Peptide - Protein Information**Name** RWDD3**Synonyms** RSUME**Function**

Enhancer of SUMO conjugation. Via its interaction with UBE2I/UBC9, increases SUMO conjugation to proteins by promoting the binding of E1 and E2 enzymes, thioester linkage between SUMO and UBE2I/UBC9 and transfer of SUMO to specific target proteins which include HIF1A, PIAS, NFKBIA, NR3C1 and TOP1. Isoform 1 and isoform 2 positively regulate the NF-kappa-B signaling pathway by enhancing the sumoylation of NF-kappa-B inhibitor alpha (NFKBIA), promoting its stabilization which consequently leads to an increased inhibition of NF-kappa-B transcriptional activity. Isoform 1 and isoform 2 negatively regulate the hypoxia-inducible factor-1 alpha (HIF1A) signaling pathway by increasing the sumoylation of HIF1A, promoting its stabilization, transcriptional activity and the expression of its target gene VEGFA during hypoxia. Isoform 2 promotes the sumoylation and transcriptional activity of the glucocorticoid receptor NR3C1 and enhances the interaction of SUMO1 and NR3C1 with UBE2I/UBC9. Has no effect on ubiquitination.

Cellular Location

Nucleus. Cytoplasm. Note=Colocalizes with UBC9/UBE2I in nuclear spots.

Tissue Location

Isoform 1 and isoform 2 are expressed in glioma tumors (at protein level). Expressed in a wide number of tissues with highest expression in cerebellum, pituitary, heart, kidney, liver, stomach, pancreas, prostate and spleen. Low levels in thalamus, spinal cord, esophagus, thymus, lung and peripheral blood leukocytes. A higher level expression seen in pituitary tumors as compared to the pituitary gland.

RWDD3 Antibody (C-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

RWDD3 Antibody (C-term) Blocking Peptide - Images**RWDD3 Antibody (C-term) Blocking Peptide - Background**

RWDD3 enhances the sumoylation of a number of proteins including HIF1A, PIAS and I-kappa-B, through direct interaction with UBC9. This protein has no effect on ubiquitination.

RWDD3 Antibody (C-term) Blocking Peptide - References

Giacomini, D. Horm. Res. 71 SUPPL 2, 88-94 (2009) Carbia-Nagashima, A. Cell 131 (2), 309-323 (2007) Adams, M.D. Nature 377 (6547 SUPPL), 3-174 (1995)