

**RNF144 (UBCE7IP4) Antibody (C-term) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP2108b**

### Specification

#### **RNF144 (UBCE7IP4) Antibody (C-term) Blocking peptide - Product Information**

Primary Accession [P50876](#)

#### **RNF144 (UBCE7IP4) Antibody (C-term) Blocking peptide - Additional Information**

Gene ID 9781

##### **Other Names**

E3 ubiquitin-protein ligase RNF144A, 632-, RING finger protein 144A, UbcM4-interacting protein 4, Ubiquitin-conjugating enzyme 7-interacting protein 4, RNF144A, KIAA0161, RNF144, UBCE7IP4

##### **Target/Specificity**

The synthetic peptide sequence used to generate the antibody <a href=/product/products/AP2108b>AP2108b</a> was selected from the C-term region of human UBCE7IP4 . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

##### **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.

#### **RNF144 (UBCE7IP4) Antibody (C-term) Blocking peptide - Protein Information**

**Name** RNF144A

**Synonyms** KIAA0161, RNF144, UBCE7IP4

##### **Function**

E3 ubiquitin-protein ligase which accepts ubiquitin from E2 ubiquitin-conjugating enzymes UBE2L3 and UBE2L6 in the form of a thioester and then directly transfers the ubiquitin to targeted substrates (PubMed:<a href="http://www.uniprot.org/citations/26216882" target=\_blank>26216882</a>). Mediates the ubiquitination and degradation of the DNA damage kinase PRKDC during DNA damage (PubMed:<a href="http://www.uniprot.org/citations/24979766" target=\_blank>24979766</a>). Positively regulates DNA virus or exogenous cytosolic DNA-triggered innate immune response by mediating STING1 ubiquitination and increasing its 'Lys-6'-linked ubiquitination and translocation from the endoplasmic reticulum to the Golgi leading to downstream signaling pathways (PubMed:<a

href="http://www.uniprot.org/citations/37955227" target="\_blank">37955227

Play a positive role in EGF-dependent cell proliferation by prolonging EGF/EGFR signaling during EGF stimulation through EGFR ubiquitination (PubMed:[30171075](http://www.ncbi.nlm.nih.gov/pubmed/1285227)). Increases ERK activity independently of EGFR signaling by promoting polyubiquitination and subsequent degradation of VRK3 in the cytosol (PubMed:[33067254](http://www.ncbi.nlm.nih.gov/pubmed/15137254)).

#### **Cellular Location**

Cell membrane; Single-pass membrane protein. Cytoplasmic vesicle membrane. Endosome membrane. Endoplasmic reticulum membrane

#### **RNF144 (UBCE7IP4) Antibody (C-term) Blocking peptide - Protocols**

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

- [Blocking Peptides](#)

#### **RNF144 (UBCE7IP4) Antibody (C-term) Blocking peptide - Images**

#### **RNF144 (UBCE7IP4) Antibody (C-term) Blocking peptide - Background**

Ubiquitin is a 76 amino acid highly conserved eukaryotic polypeptide that selectively marks cellular proteins for proteolytic degradation by the 26S proteasome. The process of target selection, covalent attachment and shuttle to the 26S proteasome is a vital means of regulating the concentrations of key regulatory proteins in the cell by limiting their lifespans. Polyubiquitination is a common feature of this modification. Serial steps for modification include the activation of ubiquitin, an ATP-dependent formation of a thioester bond between ubiquitin and the enzyme E1, transfer by transacylation of ubiquitin from E1 to the ubiquitin conjugating enzyme E2, and covalent linkage to the target protein directly by E2 or via E3 ligase enzyme. Deubiquitination enzymes also exist to reverse the marking of protein substrates. Posttranslational tagging by Ub is involved in a multitude of cellular processes, including the cell cycle, cell growth and differentiation, embryogenesis, apoptosis, signal transduction, DNA repair, regulation of transcription and DNA replication, transmembrane transport, stress responses, the immune response, and nervous system functions.

#### **RNF144 (UBCE7IP4) Antibody (C-term) Blocking peptide - References**

Strausberg, R.L., et al., Proc. Natl. Acad. Sci. U.S.A. 99(26):16899-16903 (2002). Nagase, T., et al., DNA Res. 3(1):17-24 (1996).