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UBB Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP13217a

Specification

UBB Antibody (N-term) Blocking Peptide - Product Information

Primary Accession P0CG47

UBB Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 7314

Other Names
Polyubiquitin-B, Ubiquitin, UBB

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP13217a was selected from the N-term region of UBB. 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.

UBB Antibody (N-term) Blocking Peptide - Protein Information

Name UBB

Function
[Ubiquitin]: Exists either covalently attached to another protein, or free (unanchored). When covalently bound, it is conjugated to target proteins via an isopeptide bond either as a monomer (monoubiquitin), a polymer linked via different Lys residues of the ubiquitin (polyubiquitin chains) or a linear polymer linked via the initiator Met of the ubiquitin (linear polyubiquitin chains). Polyubiquitin chains, when attached to a target protein, have different functions depending on the Lys residue of the ubiquitin that is linked: Lys-6-linked may be involved in DNA repair; Lys-11-linked is involved in ERAD (endoplasmic reticulum-associated degradation) and in cell-cycle regulation; Lys-29-linked is involved in proteotoxic stress response and cell cycle; Lys-33-linked is involved in kinase modification; Lys-48-linked is involved in protein degradation via the proteasome; Lys-63-linked is involved in endocytosis, DNA-damage responses as well as in signaling processes leading to activation of the transcription factor NF-kappa-B. Linear polymer chains formed via attachment by the initiator Met lead to cell signaling. Ubiquitin is usually conjugated to Lys residues of target proteins, however, in rare cases, conjugation to Cys or Ser

residues has been observed. When polyubiquitin is free (unanchored-polyubiquitin), it also has distinct roles, such as in activation of protein kinases, and in signaling.

Cellular Location
[Ubiquitin]: Cytoplasm. Nucleus. Mitochondrion outer membrane; Peripheral membrane protein

UBB Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

UBB Antibody (N-term) Blocking Peptide - Images

UBB Antibody (N-term) Blocking Peptide - Background

This gene encodes ubiquitin, one of the most conservedproteins known. Ubiquitin is required for ATP-dependent,nonlysosomal intracellular protein degradation of abnormal proteinsand normal proteins with a rapid turnover. Ubiquitin is covalentlybound to proteins to be degraded, and presumably labels theseproteins for degradation. Ubiquitin also binds to histone H2A inactively transcribed regions but does not cause histone H2Adegradation, suggesting that ubiquitin is also involved inregulation of gene expression. This gene consists of three directrepeats of the ubiquitin coding sequence with no spacer sequence.Consequently, the protein is expressed as a polyubiquitin precursorwith a final amino acid after the last repeat. Aberrant form ofthis protein has been noticed in patients with Alzheimer's and Downsyndrome.

UBB Antibody (N-term) Blocking Peptide - References

Komander, D. Biochem. Soc. Trans. 37 (PT 5), 937-953 (2009) :Choudhary, C., et al. Science 325(5942):834-840(2009)Tank, E.M., et al. PLoS Genet. 5 (2), E1000382 (2009) :Motegi, A., et al. Proc. Natl. Acad. Sci. U.S.A. 105(34):12411-12416(2008)Sugiura, T., et al. Exp. Cell Res. 314(7):1519-1528(2008)