

# **UBB(Ubiquitin) Blocking Peptide (N-term)**

Synthetic peptide Catalog # BP20853a

### **Specification**

## **UBB(Ubiquitin) Blocking Peptide (N-term) - Product Information**

Primary Accession	P0CG47
Other Accession	P62975, P62972, P0CG69, P62976, P0CG71,
	<u>Q63429</u> , <u>P0CG68</u> , <u>P0CG50</u> , <u>P0CG48</u> , <u>P0CH28</u> ,
	POCG51, POCG49, POCG62, POCG53, P62982,
	P62983, P62979, P15357, P79781, P62992,
	P62986, P63053, P62984, P0C273, P62987,
	P18101, P49632, P63048, P0C276, Q8MKD1,
	P0CG55

## **UBB(Ubiquitin) Blocking Peptide (N-term) - Additional Information**

#### **Gene ID 7314**

### **Other Names**

Polyubiquitin-B, Ubiquitin, UBB

# **Target/Specificity**

The synthetic peptide sequence is selected from aa 25-37 of HUMAN UBB

#### **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(Ubiquitin) Blocking Peptide (N-term) - 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(Ubiquitin) Blocking Peptide (N-term) - Protocols**

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

### • Blocking Peptides

**UBB(Ubiquitin) Blocking Peptide (N-term) - Images** 

### UBB(Ubiquitin) Blocking Peptide (N-term) - Background

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 lysosomal degradation; 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.

# **UBB(Ubiquitin) Blocking Peptide (N-term) - References**

Baker R.T., et al. Nucleic Acids Res. 15:443-463(1987). Tachikui H., et al.J. Mol. Evol. 57:737-744(2003). Zody M.C., et al. Nature 440:1045-1049(2006). Lubec G., et al. Submitted (DEC-2008) to UniProtKB. Schlesinger D.H., et al. Nature 255:423-424(1975).