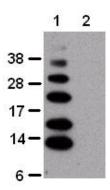


Anti-Human Ub-K63 Purified

Catalog Number: 14-6077

Also Known As:K63-linked polyubiquitin, Lysine63-linked poly ubiquitin chain

RUO: For Research Use Only



In vitro linked and purified polyubiquitin chains were analyzed by SDS-PAGE followed by immunoblotting with Anti-Human Ub-K63 Purified. The antibody detects lysine-63-linked chains (lane 1), but does not detect lysine-48-linked chains (lane 2).

Product Information

Contents: Anti-Human Ub-K63 Purified

REF Catalog Number: 14-6077

Clone: HWA4C4

Concentration: 0.5 mg/ml Host/Isotype: Mouse IgG2a Formulation: aqueous buffer, 0.09% sodium azide, may contain

carrier protein/stabilizer

Temperature Limitation: Store at 2-8°C.

Batch Code: Refer to Vial

Use By: Refer to Vial

Caution, contains Azide

Description

Ubiquitin is a highly conserved 76kDa protein which is ligated to many proteins in both monomeric and polymeric forms. Ubiquitin polymers (polyubiquitin) can be found in several varieties depending on which of its 7 lysine residues is the site of ligation. The two most common polymer chains are linked via an isopeptide bond between glycine-76 and either lysine-48 (K-48) or lysine-63 (K-63). K-48-linked polyubiquitination typically results in targeting the protein to the 26S proteosome resulting in proteolysis, although recently exceptions to this have been observed. In contrast, K-63-linked polyubiquitination results in signals related to intracellular trafficking, cell signaling, ribosomal biogenesis, and DNA damage repair. There are also reports that K63-linked polyubiquitin is involved in proteosome-independent proteolysis via autophagy.

HWA4C4 reacts specifically with the isopeptide linkage region of lysine-63-linked polyubiquitin. It does not react with other forms of ubiquitin including ubiquitin monomer and lysine-48-linked chains.

Applications Reported

This HWA4C4 antibody has been reported for use in immunoblotting (WB).

Applications Tested

This HWA4C4 antibody has been tested by immunoblot of lysine-63-linked polyubiquitin chains. This can be used at less than or equal to 2µg/ml. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

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Sato Y, Yoshikawa A, Yamagata A, Mimura H, Yamashita M, Ookata K, Nureki O, Iwai K, Komada M, Fukai S. Structural basis for specific cleavage of Lys 63-linked polyubiquitin chains. Nature. 2008 Sep 18;455(7211):358-62.

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Li W, Ye Y. Polyubiquitin chains: functions, structures, and mechanisms. Cell Mol Life Sci. 2008 Aug;65(15):2397-406.

Related Products

13-6078 Anti-Ubiquitin Biotin (eBioP4D1 (P4D1))

14-4724 Mouse IgG2a K Isotype Control Purified

14-6078 Anti-Ubiquitin Purified (eBioP4D1 (P4D1))

18-8817 Mouse TrueBlot® ULTRA: Anti-Mouse Ig HRP

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