10320 Camino Santa Fe, Suite G San Diego, CA 92121 Tel: 858.875.1900 Fax: 858.875.1999



Anti-Polyubiquitin Reference Antibody (Genentech patent anti-Polyubiquitin)

Recombinant Antibody Catalog # APR11016

Product Information

Application FC, Kinetics, Animal Model

77039

Primary Accession
Reactivity
Human
Clonality
Monoclonal
Isotype
IgG1

Additional Information

Target/Specificity Polyubiquitin

Endotoxin

Calculated MW

Conjugation Unconjugated

Expression system CHO Cell

Format Purified monoclonal antibody supplied in PBS, pH6.0, without

preservative. This antibody is purified through a protein A column.

Protein Information

Name UBC

Function [Ubiquitin]: Exists either covalently attached to another protein, or free

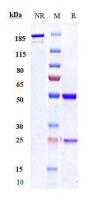
(unanchored). When covalently bound, it is conjugated to target proteins via an isopeptide bond either as a monomer (monoubiquitin), a polymer linked via different Lys residues of the ubiquitin (polyubiquitin chains) or a linear polymer linked via the initiator Met of the ubiquitin (linear polyubiquitin 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. During ubiquitination, the acceptor ubiquitin is positioned in the active site via direct interaction with the E2 ubiquitin-conjugating enzymes such as UBE2R2 (PubMed:38326650). As a monoubiquitin, its C- terminal glycine is recognized as a C-degron by Cul2-RING (CRL2) E3 ubiquitin-protein ligase complexes (PubMed:39548056).

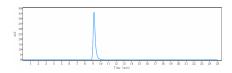
Cellular Location

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

Images



Anti-Polyubiquitin Reference Antibody (Genentech patent anti-Polyubiquitin) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%



The purity of Anti-Polyubiquitin Reference Antibody (Genentech patent anti-Polyubiquitin)is more than 95% ,determined by SEC-HPLC.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.