

Anti-UBR2 Picoband™ Antibody (monoclonal, 2G10)
Catalog # ABO15018**Specification****Anti-UBR2 Picoband™ Antibody (monoclonal, 2G10) - Product Information**

Application	WB
Primary Accession	Q8I WV8
Host	Mouse
Isotype	Mouse IgG2a
Reactivity	Human
Clonality	Monoclonal
Format	Lyophilized

Description

Anti-UBR2 Picoband™ Antibody (monoclonal, 2G10) . Tested in WB applications. This antibody reacts with Human.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-UBR2 Picoband™ Antibody (monoclonal, 2G10) - Additional Information

Gene ID 23304

Other Names

E3 ubiquitin-protein ligase UBR2, 2.3.2.27, N-recognin-2, RING-type E3 ubiquitin transferase UBR2, Ubiquitin-protein ligase E3-alpha-2, Ubiquitin-protein ligase E3-alpha-II, UBR2, C6orf133, KIAA0349

Calculated MW

202 kDa KDa

Application Details

Western blot, 0.25-0.5 µg/ml, Human

Contents

Each vial contains 4mg Trehalose, 0.9mg NaCl and 0.2mg Na2HPO4.

Immunogen

E.coli-derived human UBR2 recombinant protein (Position: Q10-A664).

Purification

Immunogen affinity purified.

Storage

Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.

Anti-UBR2 Picoband™ Antibody (monoclonal, 2G10) - Protein Information

Name UBR2**Synonyms** C6orf133, KIAA0349**Function**

E3 ubiquitin-protein ligase which is a component of the N-end rule pathway (PubMed:15548684, PubMed:20835242, PubMed:28392261). Recognizes and binds to proteins bearing specific N-terminal residues (N-degrons) that are destabilizing according to the N-end rule, leading to their ubiquitination and subsequent degradation (PubMed:20835242, PubMed:28392261). Recognizes both type-1 and type-2 N-degrons, containing positively charged amino acids (Arg, Lys and His) and bulky and hydrophobic amino acids, respectively (PubMed:20835242, PubMed:28392261). Does not ubiquitinate proteins that are acetylated at the N-terminus (PubMed:20835242). In contrast, it strongly binds methylated N-degrons (PubMed:28392261). Plays a critical role in chromatin inactivation and chromosome-wide transcriptional silencing during meiosis via ubiquitination of histone H2A (By similarity). Binds leucine and is a negative regulator of the leucine-mTOR signaling pathway, thereby controlling cell growth (PubMed:20298436). Required for spermatogenesis, promotes, with Tex19.1, SPO11-dependent recombination foci to accumulate and drive robust homologous chromosome synapsis (By similarity). Polyubiquitinates LINE-1 retrotransposon encoded, LIRE1, which induces degradation, inhibiting LINE-1 retrotransposon mobilization (By similarity). Catalyzes ubiquitination and degradation of the N-terminal part of NLRP1 following NLRP1 activation by pathogens and other damage-associated signals: ubiquitination promotes degradation of the N-terminal part and subsequent release of the cleaved C-terminal part of NLRP1, which polymerizes and forms the NLRP1 inflammasome followed by host cell pyroptosis (By similarity). Plays a role in T-cell receptor signaling by inducing 'Lys-63'-linked ubiquitination of lymphocyte cell-specific kinase LCK (PubMed:38225265). This activity is regulated by DUSP22, which induces 'Lys-48'-linked ubiquitination of UBR2, leading to its proteasomal degradation by SCF E3 ubiquitin-protein ligase complex (PubMed:38225265).

Cellular Location

Nucleus {ECO:0000250|UniProtKB:Q6WKZ8}. Chromosome {ECO:0000250|UniProtKB:Q6WKZ8}. Note=Associated with chromatin during meiosis. {ECO:0000250|UniProtKB:Q6WKZ8}

Tissue Location

Broadly expressed, with highest levels in skeletal muscle, kidney and pancreas. Present in acinar cells of the pancreas (at protein level).

Anti-UBR2 Picoband™ Antibody (monoclonal, 2G10) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)

- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-UBR2 Picoband™ Antibody (monoclonal, 2G10) - Images

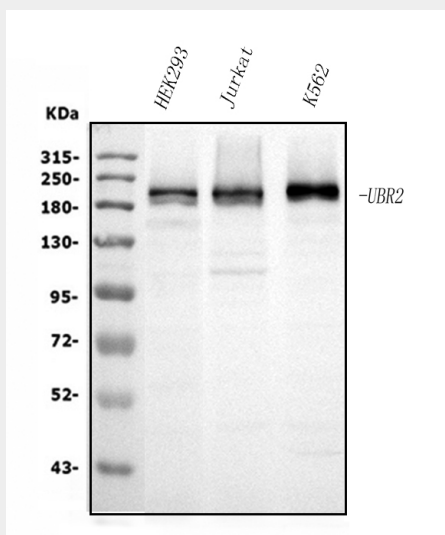


Figure 1. Western blot analysis of UBR2 using anti-UBR2 antibody (M05812).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.

Lane 1: human HEK293 whole cell lysates,

Lane 2: human Jurkat whole cell lysates,

Lane 3: human K562 whole cell lysates.

After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-UBR2 antigen affinity purified monoclonal antibody (Catalog # M05812) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-mouse IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1001) with Tanon 5200 system. A specific band was detected for UBR2 at approximately 202KD. The expected band size for UBR2 is at 202KD.

Anti-UBR2 Picoband™ Antibody (monoclonal, 2G10) - Background

E3 ubiquitin-protein ligase UBR2 is an enzyme that in humans is encoded by the UBR2 gene. It is mapped to 6p21.1. This gene encodes an E3 ubiquitin ligase of the N-end rule proteolytic pathway that targets proteins with destabilizing N-terminal residues for polyubiquitylation and proteasome-mediated degradation. Alternative splicing results in multiple transcript variants.