

Anti-UBE1C Picoband Antibody

Catalog # ABO12524

Specification

Anti-UBE1C Picoband Antibody - Product Information

Application Primary Accession Host Reactivity Clonality Format Description WB, IHC <u>O8TBC4</u> Rabbit Human, Mouse, Rat Polyclonal Lyophilized

Rabbit IgG polyclonal antibody for NEDD8-activating enzyme E1 catalytic subunit(UBA3) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

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

Anti-UBE1C Picoband Antibody - Additional Information

Gene ID 9039

Other Names NEDD8-activating enzyme E1 catalytic subunit, 6.3.2.-, NEDD8-activating enzyme E1C, Ubiquitin-activating enzyme E1C, Ubiquitin-like modifier-activating enzyme 3, Ubiquitin-activating enzyme 3, UBA3, UBE1C

Calculated MW 51852 MW KDa

Application Details Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μg/ml, Mouse, Rat, Human, By Heat

 Western blot, 0.1-0.5 μg/ml, Human, Rat

Tissue Specificity Ubiquitously expressed. .

Protein Name NEDD8-activating enzyme E1 catalytic subunit

Contents Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human UBE1C (409-448aa KNRTLYLQSVTSIEERTRPNLSKTLKELGLVDGQELAVAD), identical to the related mouse and rat sequences.

Purification



Immunogen affinity purified.

Cross Reactivity No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Anti-UBE1C Picoband Antibody - Protein Information

Name UBA3

Synonyms UBE1C

Function

Catalytic subunit of the dimeric UBA3-NAE1 E1 enzyme. E1 activates NEDD8 by first adenylating its C-terminal glycine residue with ATP, thereafter linking this residue to the side chain of the catalytic cysteine, yielding a NEDD8-UBA3 thioester and free AMP. E1 finally transfers NEDD8 to the catalytic cysteine of UBE2M. Down- regulates steroid receptor activity. Necessary for cell cycle progression.

Tissue Location Ubiquitously expressed.

Anti-UBE1C Picoband Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-UBE1C Picoband Antibody - Images





Anti- UBE1C Picoband antibody, ABO12524, Western blottingAll lanes: Anti UBE1C (ABO12524) at 0.5ug/mlLane 1: Rat Brain Tissue Lysate at 50ugLane 2: HELA Whole Cell Lysate at 40ugPredicted bind size: 52KDObserved bind size: 52KD



Anti- UBE1C Picoband antibody, ABO12524,IHC(P)IHC(P): Mouse Testis Tissue



Anti- UBE1C Picoband antibody, ABO12524,IHC(P)IHC(P): Rat Testis Tissue

Anti-UBE1C Picoband Antibody - Background

NEDD8-activating enzyme E1 catalytic subunit is a protein that in humans is encoded by the UBA3 gene. The modification of proteins with ubiquitin is an important cellular mechanism for targeting abnormal or short-lived proteins for degradation. Ubiquitination involves at least three classes of enzymes: ubiquitin-activating enzymes, or E1s, ubiquitin-conjugating enzymes, or E2s, and



ubiquitin-protein ligases, or E3s. This gene encodes a member of the E1 ubiquitin-activating enzyme family. The encoded enzyme associates with AppBp1, an amyloid beta precursor protein binding protein, to form a heterodimer, and then the enzyme complex activates NEDD8, an ubiquitin-like protein, which regulates cell division, signaling and embryogenesis. Multiple alternatively spliced transcript variants encoding distinct isoforms have been found for this gene.