

Anti-CUEDC2 Antibody

Catalog # ABO11269

### Specification

## Anti-CUEDC2 Antibody - Product Information

ApplicationWB, IHCPrimary Accession09H467HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for CUE domain-containing protein 2(CUEDC2) detection. Tested

with WB, IHC-P in Human;Mouse;Rat.

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

### Anti-CUEDC2 Antibody - Additional Information

Gene ID 79004

**Other Names** CUE domain-containing protein 2, CUEDC2, C10orf66

Calculated MW 32009 MW KDa

**Application Details** Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat<br>Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat<br>

Subcellular Localization Cytoplasm . Nucleus .

### **Tissue Specificity**

Significantly up-regulated in breast tumor tissues compared with matched adjacent normal tissues (at protein level). Levels inversely correlate with ESR1 in breast cancers and are lower in low-grade tumors compared to high-grade tumors.

**Protein Name** CUE domain-containing protein 2

Contents

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

#### Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human CUEDC2(267-287aa EAEEMKATYINLKPARKYRFH), identical to the related mouse sequence, and different from the



related rat sequence by one amino acid.

**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.

Sequence Similarities Belongs to the CUEDC2 family.

### **Anti-CUEDC2 Antibody - Protein Information**

Name CUEDC2

Synonyms C10orf66

Function

Down-regulates ESR1 protein levels through the ubiquitination-proteasome pathway, regardless of the presence of 17 beta-estradiol. Also involved in 17 beta-estradiol-induced ESR1 degradation. Controls PGR protein levels through a similar mechanism.

Cellular Location Cytoplasm. Nucleus

**Tissue Location** 

Significantly up-regulated in breast tumor tissues compared with matched adjacent normal tissues (at protein level) Levels inversely correlate with ESR1 in breast cancers and are lower in low-grade tumors compared to high-grade tumors

### Anti-CUEDC2 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-CUEDC2 Antibody - Images





Anti-CUEDC2 antibody, ABO11269, Western blottingRecombinant Protein Detection Source: E.coli derived -recombinant human CuEDC2, 28.9KD(162aa tag+ N197-H287)Lane 1: Recombinant Human CuEDC2 Protein 10ngLane 2: Recombinant Human CuEDC2 Protein 5ngLane 3: Recombinant Human CuEDC2 Protein 2.5ngLane 4: Recombinant Human CuEDC2 Protein 1.25ng



Anti-CUEDC2 antibody, ABO11269, IHC(P)IHC(P): Human Thyroid Cancer Tissue

# Anti-CUEDC2 Antibody - Background

CUEDC2(Cue Domain-Containing Protein 2) is involved in ubiquitin-and proteasome-mediated degradation of progesterone receptor(PR, or PGR) and estrogen receptor(ER)-alpha. Hartz(2011) mapped the CUEDC2 gene to chromosome 10q24.32 based on an alignment of the CUEDC2 sequence with the genomic sequence(GRCh37). Using coimmunoprecipitation analysis and protein pull-down assays, Zhang et al.(2007) confirmed that CUEDC2 interacted with the PRB isoform of PR. Mutation analysis revealed that the IF domain of PRB and the CUE domain of CUEDC2 were required for the interaction. CUEDC2 reduced PRB protein content and promoted progesterone-induced PRB degradation via the ubiquitin-proteasome pathway.