

## **RBCK1 (UBCE7IP3) Antibody**

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8638b

## **Specification**

# **RBCK1 (UBCE7IP3) Antibody - Product Information**

Application WB,E
Primary Accession Q9BYM8
Reactivity Human
Host Mouse
Clonality monoclonal
Isotype IgG1,k
Calculated MW 57572

# RBCK1 (UBCE7IP3) Antibody - Additional Information

### **Gene ID 10616**

#### **Other Names**

RanBP-type and C3HC4-type zinc finger-containing protein 1, 6.3.2.-, HBV-associated factor 4, Heme-oxidized IRP2 ubiquitin ligase 1, HOIL-1, Hepatitis B virus X-associated protein 4, RING finger protein 54, Ubiquitin-conjugating enzyme 7-interacting protein 3, RBCK1, C20orf18, RNF54, UBCE7IP3, XAP3, XAP4

## Target/Specificity

This RBCK1 (UBCE7IP3) antibody is generated from a mouse immunized with a recombinant protein of human RBCK1 (UBCE7IP3).

### **Dilution**

WB~~1:2000

E~~Use at an assay dependent concentration.

#### **Format**

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

### **Precautions**

RBCK1 (UBCE7IP3) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# **RBCK1 (UBCE7IP3) Antibody - Protein Information**

### Name RBCK1



Function E3 ubiquitin-protein ligase, which accepts ubiquitin from specific E2 ubiquitin-conjugating enzymes, such as UBE2L3/UBCM4, and then transfers it to substrates (PubMed:12629548, PubMed:17449468, PubMed:18711448). Functions as an E3 ligase for oxidized IREB2 and both heme and oxygen are necessary for IREB2 ubiquitination (PubMed:12629548). Promotes ubiquitination of TAB2 and IRF3 and their degradation by the proteasome (PubMed: 17449468, PubMed: 18711448). Component of the LUBAC complex which conjugates linear ('Met-1'-linked) polyubiquitin chains to substrates and plays a key role in NF-kappa-B activation and regulation of inflammation (PubMed: 17006537, PubMed: 19136968, PubMed: 21455173, PubMed: 21455180, PubMed: 21455181). LUBAC conjugates linear polyubiquitin to IKBKG and RIPK1 and is involved in activation of the canonical NF-kappa-B and the INK signaling pathways (PubMed: 17006537, PubMed: 19136968, PubMed: 21455173, PubMed: 21455180, PubMed: 21455181). Linear ubiquitination mediated by the LUBAC complex interferes with TNF-induced cell death and thereby prevents inflammation (PubMed: 17006537, PubMed:21455173, PubMed:21455180, PubMed:21455181), LUBAC is recruited to the TNF-R1 signaling complex (TNF-RSC) following polyubiquitination of TNF-RSC components by BIRC2 and/or BIRC3 and to conjugate linear polyubiquitin to IKBKG and possibly other components contributing to the stability of the complex (PubMed: <u>17006537</u>, PubMed: <u>19136968</u>, PubMed: <u>21455173</u>, PubMed: 21455180, PubMed: 21455181). The LUBAC complex is also involved in innate immunity by conjugating linear polyubiquitin chains at the surface of bacteria invading the cytosol to form the ubiquitin coat surrounding bacteria (PubMed: 28481331). LUBAC is not able to initiate formation of the bacterial ubiquitin coat, and can only promote formation of linear polyubiquitins on pre-existing ubiquitin (PubMed: 28481331). The bacterial ubiquitin coat acts as an 'eat-me' signal for xenophagy and promotes NF-kappa-B activation (PubMed: 28481331). Together with OTULIN, the LUBAC complex regulates the canonical Wnt signaling during angiogenesis (PubMed: 23708998). Binds polyubiquitin of different linkage types (PubMed: 20005846, PubMed: 21455181).

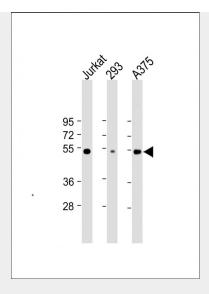
# RBCK1 (UBCE7IP3) Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## RBCK1 (UBCE7IP3) Antibody - Images





All lanes: Anti-RBCK1 (UBCE7IP3) Antibody at 1:2000 dilution Lane 1: Jurkat whole cell lysate Lane 2: 293 whole cell lysate Lane 3: A375 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 58 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

## RBCK1 (UBCE7IP3) Antibody - Background

E3 ubiquitin-protein ligase, which accepts ubiquitin from specific E2 ubiquitin-conjugating enzymes, such as UBE2L3/UBCM4, and then transfers it to substrates. Functions as an E3 ligase for oxidized IREB2 and both heme and oxygen are necessary for IREB2 ubiquitination. Promotes ubiquitination of TAB2 and IRF3 and their degradation by the proteasome. Component of the LUBAC complex which conjugates linear ('Met-1'-linked) polyubiquitin chains to substrates and plays a key role in NF- kappa-B activation and regulation of inflammation. LUBAC conjugates linear polyubiquitin to IKBKG and RIPK1 and is involved in activation of the canonical NF-kappa-B and the JNK signaling pathways. Linear ubiquitination mediated by the LUBAC complex interferes with TNF-induced cell death and thereby prevents inflammation. LUBAC is proposed to be recruited to the TNF-R1 signaling complex (TNF-RSC) following polyubiquitination of TNF- RSC components by BIRC2 and/or BIRC3 and to conjugate linear polyubiquitin to IKBKG and possibly other components contributing to the stability of the complex. Together with FAM105B/otulin, the LUBAC complex regulates the canonical Wnt signaling during angiogenesis. Binds polyubiquitin of different linkage types.

## **RBCK1 (UBCE7IP3) Antibody - References**

Cong Y.-S.,et al.J. Biol. Chem. 272:16482-16489(1997). Yamanaka K.,et al.Nat. Cell Biol. 5:336-340(2003). Deloukas P.,et al.Nature 414:865-871(2001). Hillman R.T.,et al.Genome Biol. 5:R8.1-R8.16(2004). Zhang Y.,et al.Mol. Cell. Proteomics 4:1240-1250(2005).