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CNOT4 Antibody

Catalog # ASC10772

Product Information

Application	WB, E
Primary Accession	O95628
Other Accession	NP_037448, 56550057
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	63510
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	CNOT4 antibody can be used for detection of CNOT4 by Western blot at 1 - 2 g/mL.

Additional Information

Gene ID	4850
Other Names	CCR4-NOT transcription complex subunit 4, 6.3.2.-, CCR4-associated factor 4, E3 ubiquitin-protein ligase CNOT4, Potential transcriptional repressor NOT4Hp, CNOT4, NOT4
Target/Specificity	CNOT4;
Reconstitution & Storage	CNOT4 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	CNOT4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CNOT4
Synonyms	NOT4
Function	Has E3 ubiquitin ligase activity, promoting ubiquitination and degradation of target proteins (PubMed:11823428, PubMed:22159038, PubMed:26575292). Involved in activation of the JAK/STAT pathway (PubMed:11823428, PubMed:22159038). Catalyzes ubiquitination of methylated RBM15 (PubMed:26575292). Plays a role in quality control of translation of mitochondrial outer membrane-localized mRNA (PubMed:29861391). As part of the PINK1-regulated signaling, upon mitochondria damage, ubiquitinates

ABCE1 and thereby recruits autophagy receptors to the mitochondrial outer membrane to initiate mitophagy (PubMed:29861391).

Cellular Location Cytoplasm. Nucleus.

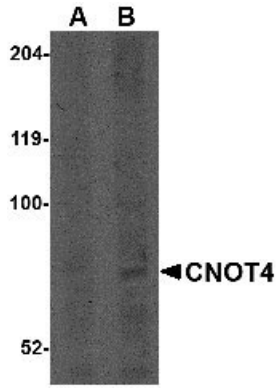
Background

CNOT4 Antibody: CNOT4 is a component of the CCR4-NOT transcription complex, a complex that is implicated in the repression of RNA polymerase II transcription. In the CCR4-NOT complex, CNOT4 acts as an E3 ubiquitin-protein ligase and interacts with a subset of E2 ubiquitin-conjugating enzymes through a unique C4C4 RING domain. This E3 ligase activity was shown to be dependent on the selective and specific interaction with the ubiquitin conjugating enzyme UbcH5B. In yeast, mutations in CNOT4 that prevented its interaction with the UbcH5B homolog UBC4 caused increased sensitivity to hydroxyurea, heat shock, and hygromycin B, suggesting that CNOT4 and UbcH5B are involved in stress response in vivo. Multiple isoforms of CNOT4 are known to exist.

References

Albert TK, Hanzawa H, Legtenberg IA, et al. Identification of a ubiquitin-protein ligase subunit within the CCR4-NOT transcription repressor complex. EMBO J.2002; 21:355-64.
Winkler GS, Albert TK, Dominguez C, et al. An altered specificity ubiquitin-conjugating enzyme/ubiquitin-protein ligase pair. J. Mol. Biol.2004; 337:157-65.
Mulder KW, Inagaki A, Cameroni E, et al. Modulation of Ubc4p/Ubc5p-mediated stress responses by the RING-finger-dependent ubiquitin-protein ligase Not4p in Saccharomyces cerevisiae. Genetics2007; 176:181-92.

Images



Western blot analysis of CNOT4 in A549 lysate with CNOT4 antibody at (A) 1 and (B) 2 µg/mL.