abcam

Product datasheet

Anti-COMMD1/MURR1 antibody ab224727

2 References 4 Images

Overview

Product name	Anti-COMMD1/MURR1 antibody
Description	Rabbit polyclonal to COMMD1/MURR1
Host species	Rabbit
Tested applications	**Suitable for:** IHC-P, IP, WB
Species reactivity	**Reacts with:** Human
Immunogen	Recombinant full length protein corresponding to Human COMMD1/MURR1 aa 1 to the C-terminus. Database link: **Q8N668** Run BLAST with Run BLAST with
Positive control	WB: A549, Jurkat, MCF7, HeLa and HepG2 whole cell lysate. IP: HepG2 whole cell lysate. IHC-P: Human adrenal gland tissue and liver cancer tissue.
General notes	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.30 Preservative: 0.02% Sodium azide Constituents: 50% Glycerol (glycerin, glycerine), PBS
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab224727 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		1/20 - 1/200.
IP		1/200 - 1/2000.
WB		1/1000 - 1/5000. Detects a band of approximately 21 kDa (predicted molecular weight: 22, 18 kDa).

Target

Function Proposed scaffold protein that is implicated in diverse physiological processes and whose function may be in part linked to its ability to regulate ubiquitination of specific cellular proteins. Can modulate activity of cullin-RING E3 ubiquitin ligase (CRL) complexes by displacing CAND1; in vitro promotes CRL E3 activity and dissociates CAND1 from CUL1 and CUL2 (PubMed:21778237). Promotes ubiquitination of NF-kappa-B subunit RELA and its subsequent proteasomal degradation. Down-regulates NF-kappa-B activity (PubMed:15799966, PubMed:17183367, PubMed:20048074). Involved in the regulation of membrane expression and ubiquitination of SLC12A2 (PubMed:23515529). Modulates Na(+) transport in epithelial cells by regulation of apical cell surface expression of amiloride-sensitive sodium channel (ENaC) subunits and by promoting their ubiquitination presumably involving NEDD4L. Promotes the localization of SCNN1D to recycling endosomes (PubMed:14645214, PubMed:20237237, PubMed:21741370). Promotes CFTR cell surface expression through regulation of its ubiquitination (PubMed:21483833). Down-regulates SOD1 activity by interfering with its homodimerization (PubMed:20595380). Plays a role in copper ion homeostasis. Involved in copper-dependent ATP7A trafficking between the trans-Golgi network and vesicles in the cell periphery; the function is proposed to depend on its association within the CCC complex and cooperation with the WASH complex on early endosomes (PubMed:25355947). Can bind one copper ion per monomer (PubMed:17309234). May function to facilitate biliary copper excretion within hepatocytes. Binds to phosphatidylinositol 4,5-bisphosphate (PtdIns(4,5)P2) (PubMed:18940794). Involved in the regulation of HIF1A-mediated transcription; competes with ARNT/Hif-1-beta for binding to HIF1A resulting in decreased DNA binding and impaired transcriptional activation by HIF-1 (PubMed:20458141).

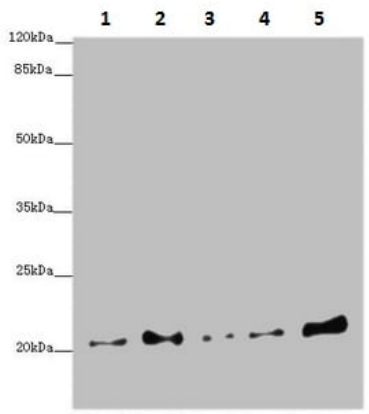
Tissue specificity Ubiquitous. Highest expression in the liver, with lower expression in brain, lung, placenta, pancreas, small intestine, heart, skeletal muscle, kidney and placenta. Down-regulated in cancer tissues.

Sequence similarities Contains 1 COMM domain.

Post-translational modifications Acetylated by EP300 ina stimuli-specific manner; protecting it from XIAP-mediated proteasomal degradation and required for interaction with RELA in response to stress.
Ubiquitinated; undergoes both 'Lys-63'- and 'Lys-48'-linked polyubiquitination. Ubiquitinated by XIAP, leading to its proteasomal degradation.

Cellular localization Nucleus. Cytoplasm. Endosome membrane. Cytoplasmic vesicle. Early endosome. Recycling endosome. Shuttles between nucleus and cytosol. Detected in perinuclear foci that may be aggresomes containing misfolded, ubiquitinated proteins.

Images



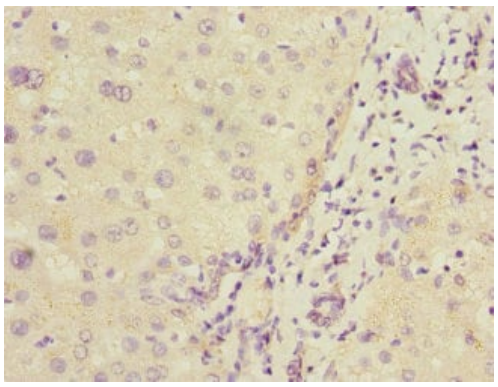
Western blot - Anti-COMMD1/MURR1 antibody (ab224727)

All lanes : Anti-COMMD1/MURR1 antibody (ab224727) at 1/1000 dilution

Lane 1 : A549 (human lung carcinoma cell line) whole cell lysate
Lane 2 : Jurkat (human T cell leukemia cell line from peripheral blood) whole cell lysate
Lane 3 : MCF7 (human breast adenocarcinoma cell line) whole cell lysate
Lane 4 : HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate
Lane 5 : HepG2 (human liver hepatocellular carcinoma cell line) whole cell lysate

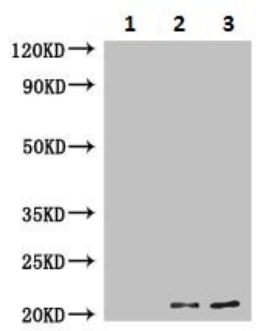
Secondary
All lanes : Goat polyclonal to Rabbit IgG at 1/10000 dilution

Predicted band size: 22, 18 kDa
Observed band size: 21 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-COMMD1/MURR1 antibody (ab224727)

Paraffin-embedded human liver cancer tissue stained for COMMD1/MURR1 with ab224727 at 1/20 dilution in immunohistochemical analysis.



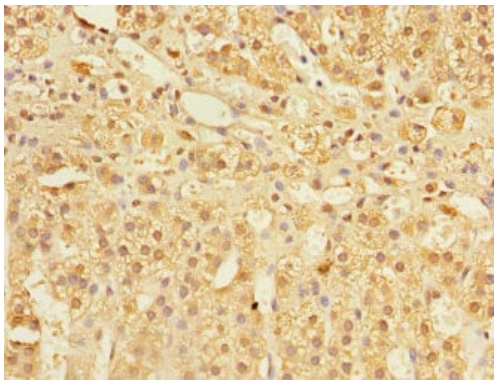
Immunoprecipitation - Anti-COMMD1/MURR1 antibody (ab224727)

COMMD1/MURR1 was immunoprecipitated from 0.5 mg of HepG2 (human liver hepatocellular carcinoma cell line) whole cell lysate with ab224727 at 1/200 dilution. Western blot was performed from the immunoprecipitate using ab224727 at 1/1000 dilution. HRP-conjugated anti-rabbit IgG, specific to the non-reduced form of IgG, was used as secondary antibody at 1/10000 dilution.

Lane 1: Rabbit monoclonal IgG instead of ab224727 in HepG2 whole cell lysate.

Lane 2: ab224727 IP in HepG2 whole cell lysate.

Lane 3: HepG2 whole cell lysate 20 µg (Input).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-COMMD1/MURR1 antibody (ab224727)

Paraffin-embedded human adrenal gland tissue stained for COMMD1/MURR1 with ab224727 at 1/20 dilution in immunohistochemical analysis.

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