# abcam

## Product datasheet

# Recombinant Human COMMD1/MURR1 protein ab98077

# 1 Image

**Description** 

Product name Recombinant Human COMMD1/MURR1 protein

Purity > 90 % SDS-PAGE.

ab98077 was purified using conventional chromatography techniques.

**Expression system** Escherichia coli

Accession Q8N668

Protein length Full length protein

Animal free No

Nature Recombinant

**Species** Human

Sequence MGSSHHHHHHSSGLVPRGSHMAAGELEGGKPLSGLLN

**ALAQDTFHGYPGI** 

TEELLRSQLYPEVPPEEFRPFLAKMRGILKSIASADMDFN

QLEAFLTAQT

KKQGGITSDQAAVISKFWKSHKTKIRESLMNQSRWNSGLR

**GLSWRVDGKS** 

QSRHSAQIHTPVAIIELELGKYGQESEFLCLEFDEVKVNQIL

KTLSEVEE SISTLISQPN

Predicted molecular weight 23 kDa including tags

Amino acids 1 to 190

Tags His tag N-Terminus

## **Specifications**

Our Abpromise guarantee covers the use of ab98077 in the following tested applications.

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

**Applications** Mass Spectrometry

SDS-PAGE

Mass spectrometry MALDI-TOF

**Form** Liquid

1

#### **Preparation and Storage**

#### Stability and Storage

Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

pH: 8.00

Constituents: 0.316% Tris HCl, 20% Glycerol (glycerin, glycerine), 0.58% Sodium chloride

#### **General Info**

#### **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 (Ptdlns(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 REIA in response to stress.

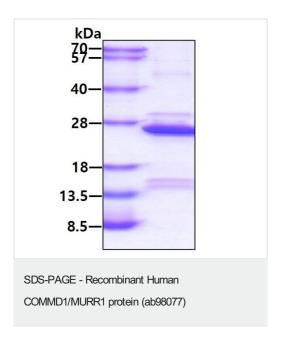
Ubiquitinated; undergoes both 'Lys-63'- and 'Lys-48'-linked polyubiquitination. Ubiquitinated by

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**



SDS-PAGE analysis of ab98077 (3µg) under reducing condition and visualized by coomassie blue stain.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- · We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.com/abpromise">https://www.abcam.com/abpromise</a> or contact our technical team.

#### Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors