Datasheet for ABIN7161752

anti-NCBP2 antibody (AA 1-156)

2 Images

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Overview

Quantity:	100 µL
Target:	NCBP2
Binding Specificity:	AA 1-156
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This NCBP2 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), ELISA

Product Details

Immunogen:	Recombinant Human Nuclear cap-binding protein subunit 2 protein (1-156AA)
Isotype:	IgG
Cross-Reactivity:	Human, Mouse
Purification:	Antigen Affinity Purified

Target Details

Target:	NCBP2
Alternative Name:	NCBP2 (NCBP2 Products)
Background:	Background: Component of the cap-binding complex (CBC), which binds co-transcriptionally to the 5\\\' cap of pre-mRNAs and is involved in various processes such as pre-mRNA splicing,

Target Details

translation regulation, nonsense-mediated mRNA decay, RNA-mediated gene silencing (RNAi) by microRNAs (miRNAs) and mRNA export. The CBC complex is involved in mRNA export from the nucleus via its interaction with ALYREF/THOC4/ALY, leading to the recruitment of the mRNA export machinery to the 5\\\' end of mRNA and to mRNA export in a 5\\\' to 3\\\' direction through the nuclear pore. The CBC complex is also involved in mediating U snRNA and intronless mRNAs export from the nucleus. The CBC complex is essential for a pioneer round of mRNA translation, before steady state translation when the CBC complex is replaced by cytoplasmic cap-binding protein eIF4E. The pioneer round of mRNA translation mediated by the CBC complex plays a central role in nonsense-mediated mRNA decay (NMD), NMD only taking place in mRNAs bound to the CBC complex, but not on eIF4E-bound mRNAs. The CBC complex enhances NMD in mRNAs containing at least one exon-junction complex (EJC) via its interaction with UPF1, promoting the interaction between UPF1 and UPF2. The CBC complex is also involved in \\\'failsafe\\\' NMD, which is independent of the EJC complex, while it does not participate in Staufen-mediated mRNA decay (SMD). During cell proliferation, the CBC complex is also involved in microRNAs (miRNAs) biogenesis via its interaction with SRRT/ARS2, thereby being required for miRNA-mediated RNA interference. The CBC complex also acts as a negative regulator of PARN, thereby acting as an inhibitor of mRNA deadenylation. In the CBC complex, NCBP2/CBP20 recognizes and binds capped RNAs (m7GpppG-capped RNA) but requires NCBP1/CBP80 to stabilize the movement of its N-terminal loop and lock the CBC into a high affinity cap-binding state with the cap structure.
Aliases: NCBP2 antibody, CBP20 antibody, PIG55 antibody, Nuclear cap-binding protein subunit 2 antibody, 20 kDa nuclear cap-binding protein antibody, Cell proliferation-inducing gene 55 protein antibody, NCBP 20 kDa subunit antibody, CBP20 antibody, NCBP-interacting protein 1 antibody, NIP1 antibody

UniProt:	P52298
Pathways:	Ribonucleoprotein Complex Subunit Organization, Methionine Biosynthetic Process

Application Details

Application Notes:	Recommended dilution: WB:1:500-1:1000, IHC:1:20-1:200,
Restrictions:	For Research Use only

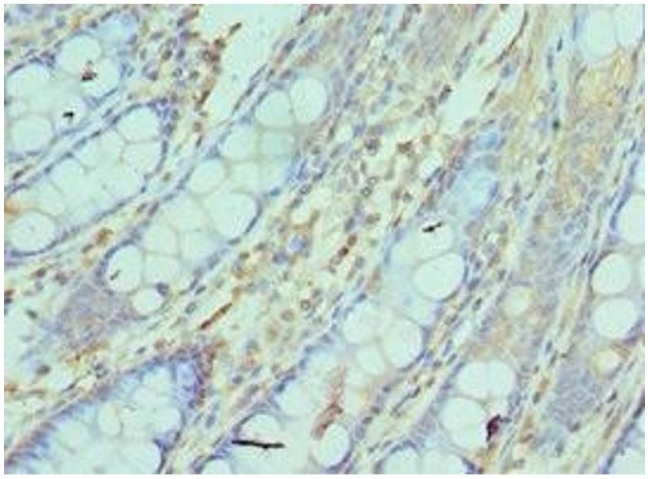
Handling

Format:	Liquid

Handling

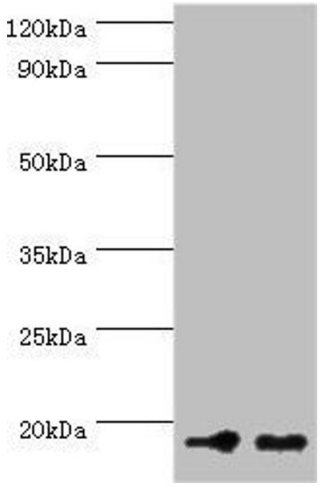
Buffer:	PBS with 0.02 % sodium azide, 50 % glycerol, pH 7.3.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

Images



Immunohistochemistry

Image 1. Immunohistochemistry of paraffin-embedded human colon tissue using ABIN7161752 at dilution of 1:100



Western Blotting

Image 2. Western blot All lanes: NCBP2 antibody at 5 µg/mL Lane 1: Hela whole cell lysate Lane 2: NIH/3T3 whole cell lysate Secondary Goat polyclonal to rabbit at 1/10000 dilution Predicted band size: 19, 16, 12 kDa Observed band size: 19 kDa