

Rabbit NCBP1 Polyclonal Antibody | anti-NCBP1 antibody

NCBP1 Antibody

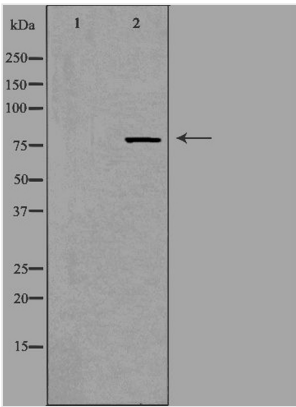
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA323948	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Western Blot

PRODUCT SYNONYMS

NCBP1; Polyclonal Antibody; NCBP1 Antibody; 80 kDa nuclear cap-binding protein; CBP80; MGC2087; NCBP 80 kDa subunit; NCBP; ncbp1; NCBP1_HUMAN; nuclear cap binding protein subunit 1; 80kDa; Nuclear cap-binding protein subunit 1; Sto1; anti-NCBP1 antibody

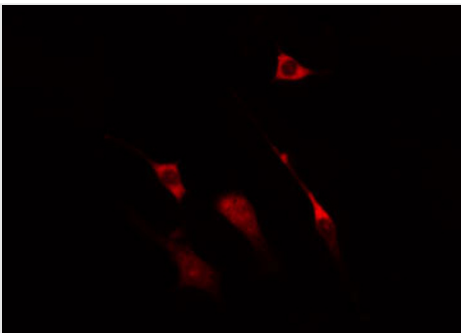
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	NCBP1 antibody detects endogenous levels of total NCBP1
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	790
Applicable Applications for anti-NCBP1 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), WB (Western Blot)
Immunogen	A synthesized peptide
Subcellular Location	Nucleus. Cytoplasm. Localized in cytoplasmic mRNP granules containing untranslated mRNAs.
Predicted Cross Reactivity	Pig, Bovine, Sheep, Rabbit, Dog, Chicken, Xenopus
Similarity	Pig (100%), Bovine (100%), Sheep (100%), Rabbit (85%), Dog (100%), Chicken (83%), Xenopus (91%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



WB (Western Blot)

Western blot analysis of extracts from HT-29 cells using NCBP1 antibody. The lane on the left is treated with the antigen-specific peptide.



IF (Immunofluorescence)

AAA323948 staining HT29 cells by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) antibody, diluted at 1/600, was used as secondary antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-NCBP1 antibody

Function: Component of the cap-binding complex (CBC), which binds cotranscriptionally to the 5'-cap of pre-mRNAs and is involved in various processes such as pre-mRNA splicing, 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 and is 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, NCBP1/CBP80 does not bind directly capped RNAs (m7GpppG-capped RNA) but is required to stabilize the movement of the N-terminal loop of NCBP2/CBP20 and lock the CBC into a high affinity cap-binding state with the cap structure. Associates with NCBP3 to form an alternative cap-binding complex (CBC) which plays a key role in mRNA export and is particularly important in cellular stress situations such as virus infections. The conventional CBC with NCBP2 binds both small nuclear RNA (snRNA) and messenger (mRNA) and is involved in their export from the nucleus whereas the alternative CBC with NCBP3 does not bind snRNA and associates only with mRNA thereby playing a role only in mRNA export. NCBP1/CBP80 is required for cell growth and viability (PubMed:26382858).

Subunit Structure: Component of the nuclear cap-binding complex (CBC), a heterodimer composed of NCBP1/CBP80 and NCBP2/CBP20 that interacts with m7GpppG-capped RNA. Found in a U snRNA export complex containing PHAX/RNUXA, NCBP1/CBP80, NCBP2/CBP20, RAN, XPO1 and m7G-capped RNA. Identified in a IGF2BP1-dependent mRNP granule complex containing untranslated mRNAs. Interacts with PHAX/RNUXA, SRRT/ARS2, EIF4G2, IGF2BP1, HNRNPF, HNRNPH1, KIAA0427/CTIF, PARN, DROSHA, UPF1 and ALYREF/THOC4. May interact with EIF4G1; the interaction is however controversial since it is reported by PubMed:11340157, PubMed:15059963 and PubMed:15361857, but is not observed by PubMed:19648179. The large PER complex involved in the repression of transcriptional termination is composed of at least PER2, CDK9, DDX5, DHX9, NCBP1/CBP80 and POLR2A. Component of an alternative nuclear cap-binding complex (CBC) composed of NCBP1/CBP80 and NCBP3 (PubMed:26382858). Interacts with METTL3 (PubMed:27117702). Interacts with ZFC3H1 in a RNase-insensitive manner (PubMed:27871484).

Similarity: Belongs to the NCBP1 family.

NCBI AND UNIPROT INFORMATION

NCBI GI # 4505343

NCBI GeneID	4686
NCBI Accession #	NP_002477.1
NCBI GenBank Nucleotide #	NM_002486.4
UniProt Accession #	Q09161 ; Q59G76 ; Q5T1V0 ; Q5T7X2 ; B2R718
Molecular Weight	Observed: 80 kD Predicted: 92 kDa
NCBI Official Full Name	nuclear cap-binding protein subunit 1 isoform 1
NCBI Official Synonym Full Names	nuclear cap binding protein subunit 1
NCBI Official Symbol	NCBP1
NCBI Official Synonym Symbols	NCBP; Sto1; CBP80
NCBI Protein Information	nuclear cap-binding protein subunit 1
UniProt Protein Name	Nuclear cap-binding protein subunit 1
UniProt Gene Name	NCBP1
UniProt Synonym Gene Names	CBP80; NCBP; CBP80; NCBP 80 kDa subunit

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/ncbp1-antibody-immunocytochemistry-immunofluorescence-western-blot-elisa/323948>