

Rabbit anti-Human, Mouse NCBP2 Polyclonal Antibody | anti-NCBP2 antibody

NCBP2 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA323905	Rabbit	Human, Mouse	ELISA, Immunocytochemistry, Immunofluorescence, Western Blot

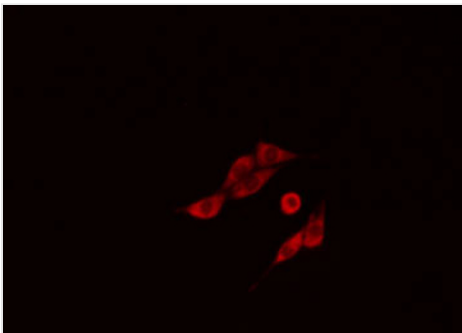
PRODUCT SYNONYMS

NCBP2; Polyclonal Antibody; NCBP2 Antibody; 20 kDa nuclear cap binding protein; CBC2; CBP20; Cell proliferation inducing gene 55 protein; NCBP 2; NCBP 20 kDa subunit; NCBP interacting protein 1; NIP1; Nuclear cap binding protein subunit 2; PIG55; anti-NCBP2 antibody

PRODUCT SPECIFICATIONS

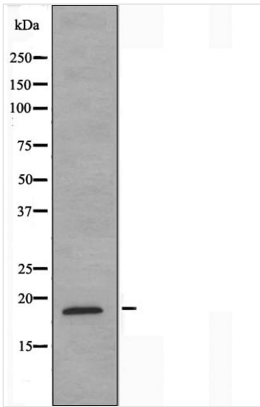
Host	Rabbit
Reactivity	Human, Mouse
Clonality	Polyclonal
Isotype	IgG
Specificity	NCBP2 antibody detects endogenous levels of total NCBP2
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	103
Applicable Applications for anti-NCBP2 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), WB (Western Blot)
Immunogen	A synthesized peptide
Subcellular Location	Cytoplasmic and Nuclear
Predicted Cross Reactivity	Pig, Bovine, Horse, Sheep, Rabbit, Dog
Similarity	Pig (100%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IF (Immunofluorescence)

AAA323905 staining COLO205 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.



WB (Western Blot)

Western blot analysis of extracts from COLO205 cells, using NCBP2 antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-NCBP2 antibody

Function: 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, 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. The conventional cap-binding complex with NCBP2 binds both small nuclear RNA (snRNA) and messenger (mRNA) and is involved in their export from the nucleus (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 (PubMed:26382858). Found in a U snRNA export complex with PHAX/RNUXA, NCBP1/CBP80, NCBP2/CBP20, RAN, XPO1 and m7G-capped RNA. Interacts with PHAX/RNUXA, EIF4G1, HNRNPF, HNRNPH1 and ALYREF/THOC4/ALY. Interacts with SRRT/ARS2 and KPNA3 (PubMed:26382858).

Similarity: Belongs to the RRM NCBP2 family.

NCBI AND UNIPROT INFORMATION

NCBI GI #	110349727
NCBI GeneID	22916
NCBI Accession #	NP_001036005.1
NCBI GenBank Nucleotide #	NM_001042540.1
UniProt Accession #	P52298; Q14924; Q2TS50; B2RE91; B4DMK7; E9PAR5
Molecular Weight	Observed: 18 kD Predicted: 19 kDa

NCBI Official Full Name	nuclear cap-binding protein subunit 2 isoform 2
NCBI Official Synonym Full Names	nuclear cap binding protein subunit 2
NCBI Official Symbol	NCBP2
NCBI Official Synonym Symbols	CBC2; NIP1; CBP20; PIG55
NCBI Protein Information	nuclear cap-binding protein subunit 2
UniProt Protein Name	Nuclear cap-binding protein subunit 2
UniProt Gene Name	NCBP2
UniProt Synonym Gene Names	CBP20; CBP20; NIP1

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/ncbp2-antibody-immunocytochemistry-immunofluorescence-western-blot-elisa/323905>