

PRODUCT INFORMATION

Product name : CTBP1 antibody

Product type : Primary antibodies

Description : Rabbit polyclonal to CTBP1

Immunogen : 3 synthetic peptides (human) conjugated to KLH

Reacts with : Hu, Ms

Tested applications : ELISA, WB and IF

GENE INFORMATION

Gene Symbol : CTBP1

Gene Name : C-terminal binding protein 1

Ensembl ID : ENSG00000159692

Entrez GeneID : 1487

GenBank Accession number : U37408

Omim ID : 602618

Swiss-Prot : Q13363

Molecular weight of CTBP1 : 47.5kDa

Function : Involved in controlling the equilibrium between tubular and stacked structures in the Golgi complex [By similarity]. Co-repressor targeting diverse transcription regulators such as GLIS2. Has dehydrogenase activity.

Expected subcellular localization : Cytoplasm, nucleus.

Summary : This gene encodes a protein that binds to the C-terminus of adenovirus E1A proteins. This phosphoprotein is a transcriptional repressor and may play a role during cellular proliferation. This protein and the product of a second closely related gene, CTBP2, can dimerize. Both proteins can also interact with a polycomb group protein complex which participates in regulation of gene expression during development. Alternative splicing of transcripts from this gene results in multiple transcript variants. [provided by RefSeq]

APPLICATION NOTE

Recommended dilution :

- **ELISA:** Antibody specificity was verified by direct ELISA against the 3 immunogen peptides. A titer of 1/13000 has been determined. Appropriate specificity controls were run.
- **WB:** 1/5000.
- **IF:** 1/1000.

Optimal dilutions/concentration should be determined by the end user.

Raised in : Rabbit

Clonality : Polyclonal

Isotype : IgG

Purity : Purified antibody

Storage buffer : 0.5 X PBS, containing a final concentration of 50% Glycerol, 0.1% BSA and 0.01% Thimerosal.

Form : Liquid

Storage instruction : Store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

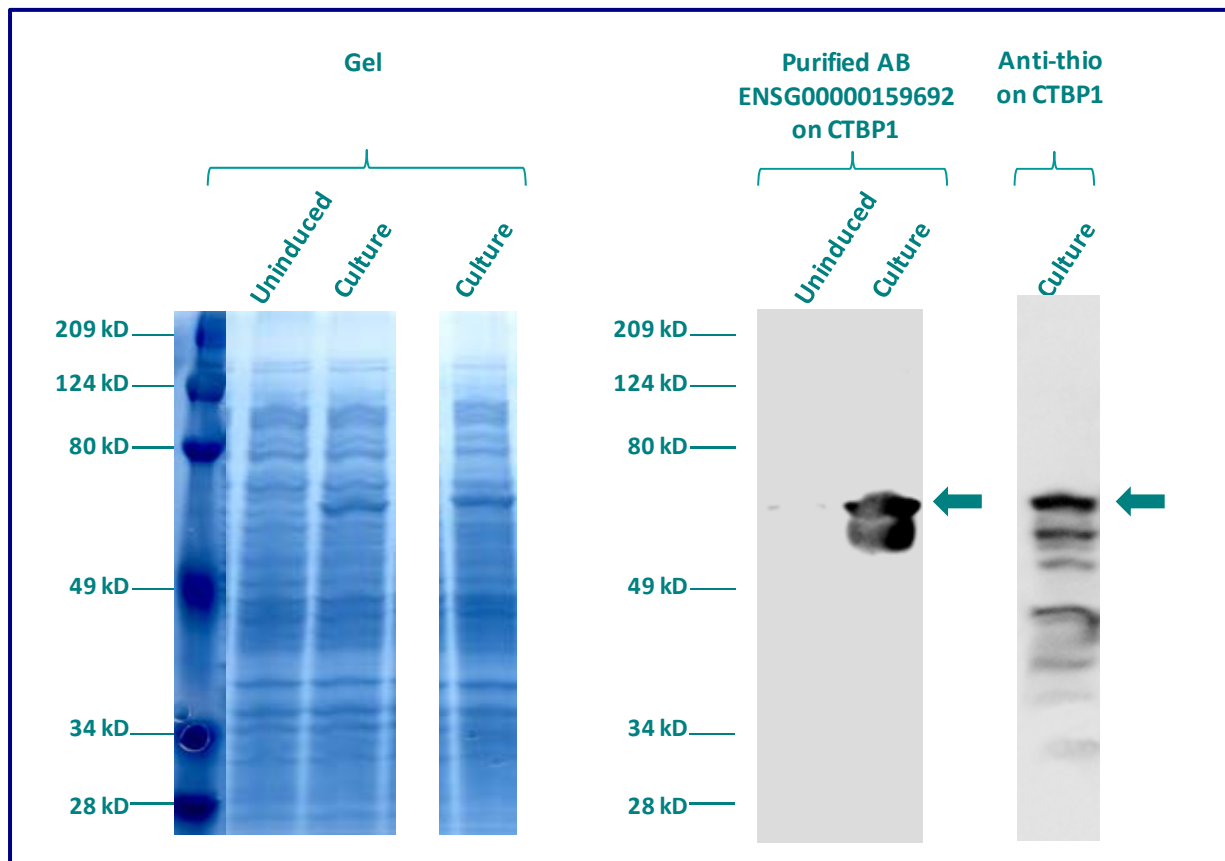
WESTERN BLOT ON RECOMBINANT PROTEIN

The purified antibody ENSG00000159692 has been tested at 1/5000 on uninduced (negative control) and induced culture of E.coli (one shot Top10 competent cells).

An anti-thio (positive control) has been tested at 1/5000 on uninduced (negative control) and induced culture of E.coli (one shot Top10 competent cells) as a positive control.

Plasmid name : pBAD-DEST49.

Molecular weight of CTBP1 : 61.5kDa (47.5kDa + another 14kDa for the tag).



Gel concentration: 10%

Blocking: in 5% non-fat milk-PBST solution

1st Antibody: The antibodies are diluted in blocking buffer.

- Dilute the purified antibody ENSG00000159692 at 1:5000
- Dilute the anti-thio at 1:5000

60 minutes of incubation

2nd Antibody: The antibody is diluted in blocking buffer.

- Dilute the anti-Rabbit IgG HRP conjugated at 1/10000
- 60 minutes of incubation

IMMUNOFLUORESCENCE ANALYSIS

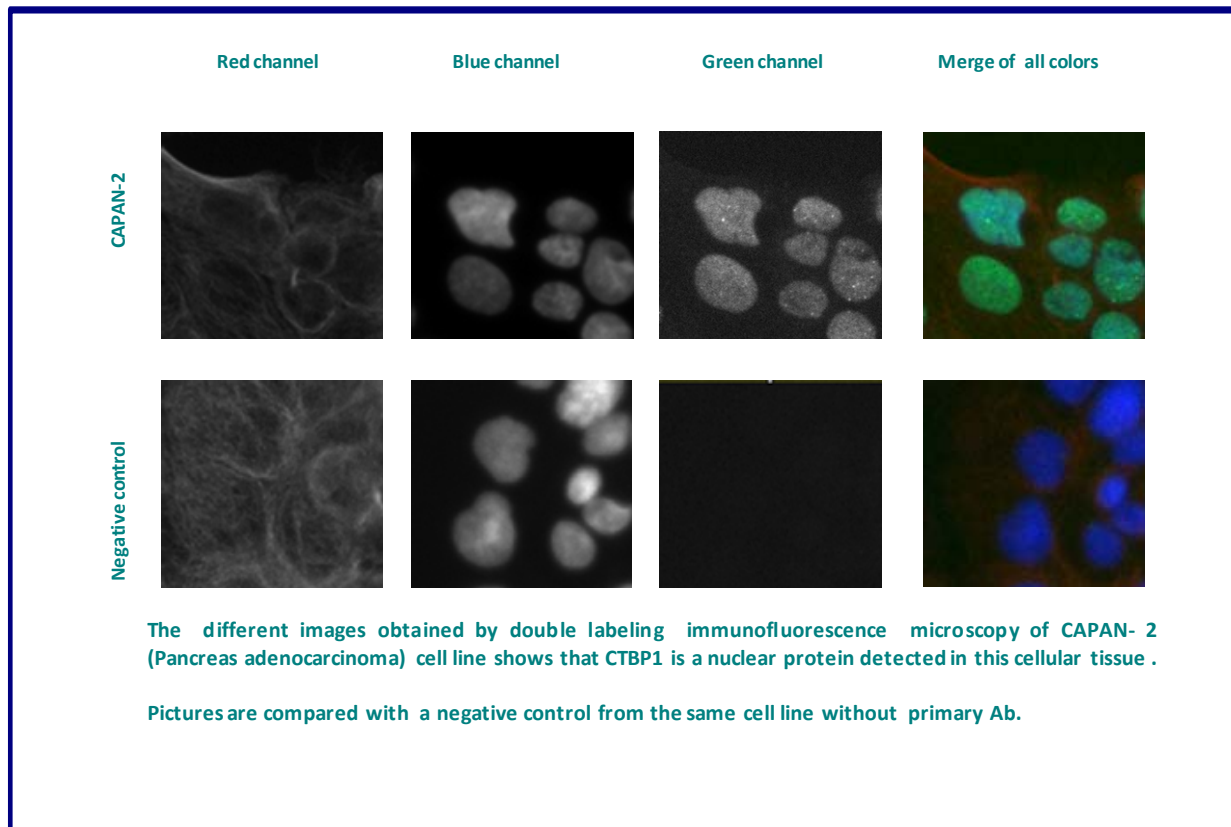
Immunofluorescence analysis of C-terminal-binding protein 1 (CTBP1) expression in 5 cell lines (293T/17, Capan-2, SAOS-2, SH-SY5Y, Skin 3,44). The purified Antibody ENSG00000159692 has been tested at 1/5000.

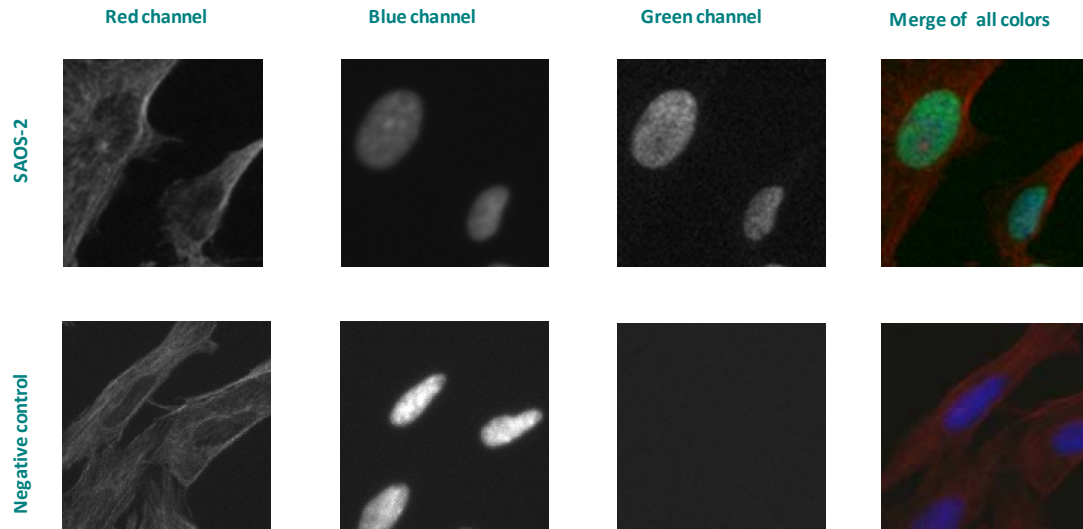
Red staining : cytoskeleton (microtubules/ α -tubuline)

Blue staining : nucleus (Hoechst)

Green staining : anti- CTBP1 antibody (purified)

Expected subcellular location : Nucleus and cytoplasm.





The different images obtained by double labeling immunofluorescence microscopy of SAOS-2 (osteosarcoma) cell line shows that CTBP1 is a nuclear protein detected in this cellular tissue .

Pictures are compared with a negative control from the same cell line without primary Ab.

Remaining cell lines tested gave a positive result with a nuclear distribution.