

PRODUCT INFORMATION

Product name : RANBP1 antibody

Product type : Primary antibodies

Description : Rabbit polyclonal to RANBP1

Immunogen : 3 synthetic peptides (human) conjugated to KLH

Reacts with : Human, Mouse

Tested applications : ELISA, WB & IF

GENE INFORMATION

Gene Symbol : RANBP1

Gene Name : RAN binding protein 1

Ensembl ID : ENSG00000099901

Entrez GeneID : 5902

GenBank Accession number : D38076

Swiss-Prot : P43487

Molecular weight of RANBP1: 23kDa

Function : Inhibits GTP exchange on Ran. Forms a Ran-GTP-RANBP1 trimeric complex.

Increase GTP hydrolysis induced by the Ran GTPase activating protein RANGAP1. May act in an intracellular signaling pathway which may control the progression through the cell cycle by regulating the transport of protein and nucleic acids across the nuclear membrane.

Summary: This gene encodes a protein that forms a complex with Ras-related nuclear protein (Ran) and metabolizes guanoside triphosphate (GTP). This complex participates in the regulation of the cell cycle by controlling transport of proteins and nucleic acids into the nucleus. There are multiple pseudogenes for this gene on chromosomes 9, 12, 17, and X. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2013]

APPLICATION NOTE

Recommended dilution :

- **ELISA:** Antibody specificity was verified by direct ELISA against the 3 immunogen peptides. A minimum titer of 1/200000 is determined for one of the three peptides. Appropriate specificity controls were run.
- **WB cell lysate:** 1:1000
- **IF:** 1/500

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

Raised in : Rabbit

Clonality : Polyclonal

Isotype : IgG

Purity : Crude serum, final bleed

Storage buffer : Crude serum containing 0.5% Azide

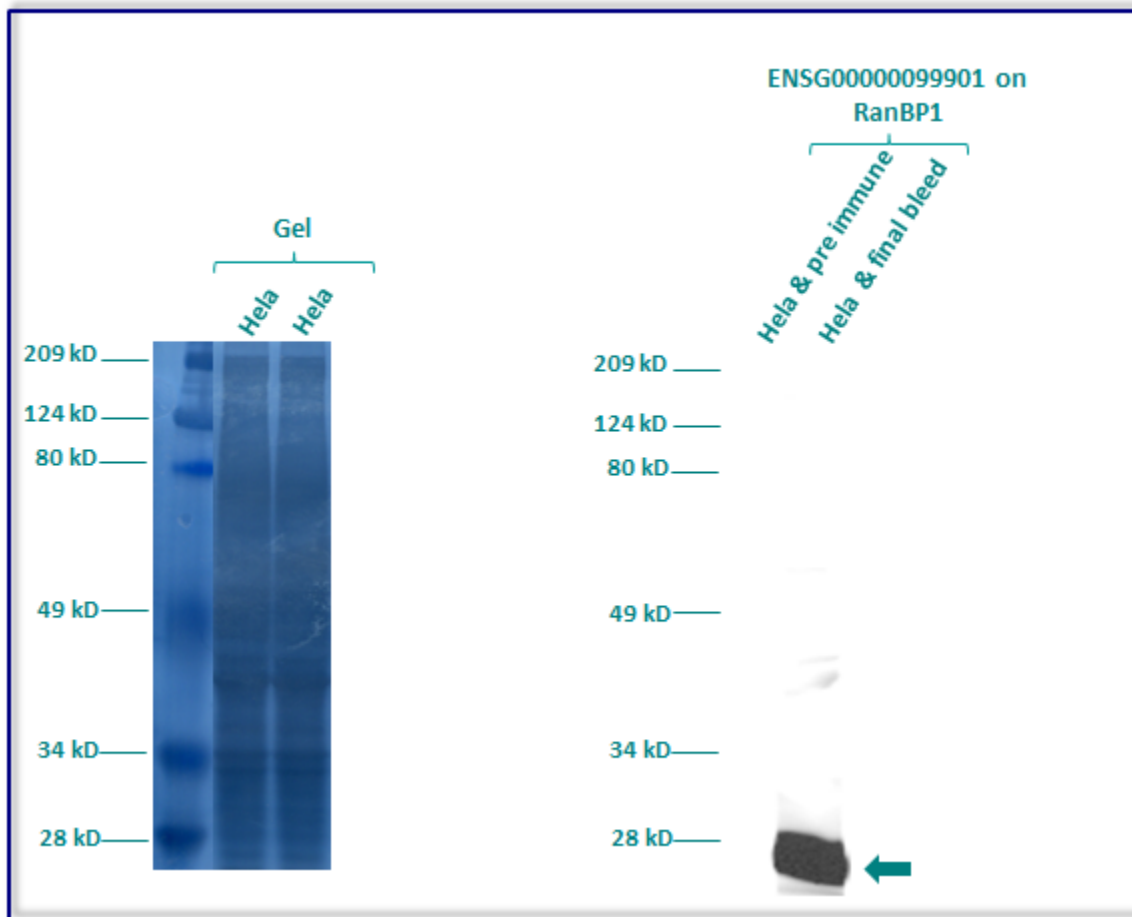
Form : Liquid

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

WESTERN BLOT ANALYSIS ON CELL LINE LYSATE

Western blot analysis of RANBP1 expression in protein extract of HeLa (Human cervix adenocarcinoma) cell line. The serum ENSG00000099901 has been tested at 1/1000.

Molecular weight of RANBP1 : 23kDa



Gel concentration: 10%

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

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

- Dilute the purified antibody ENSG00000099901 at 1: 1000
- 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

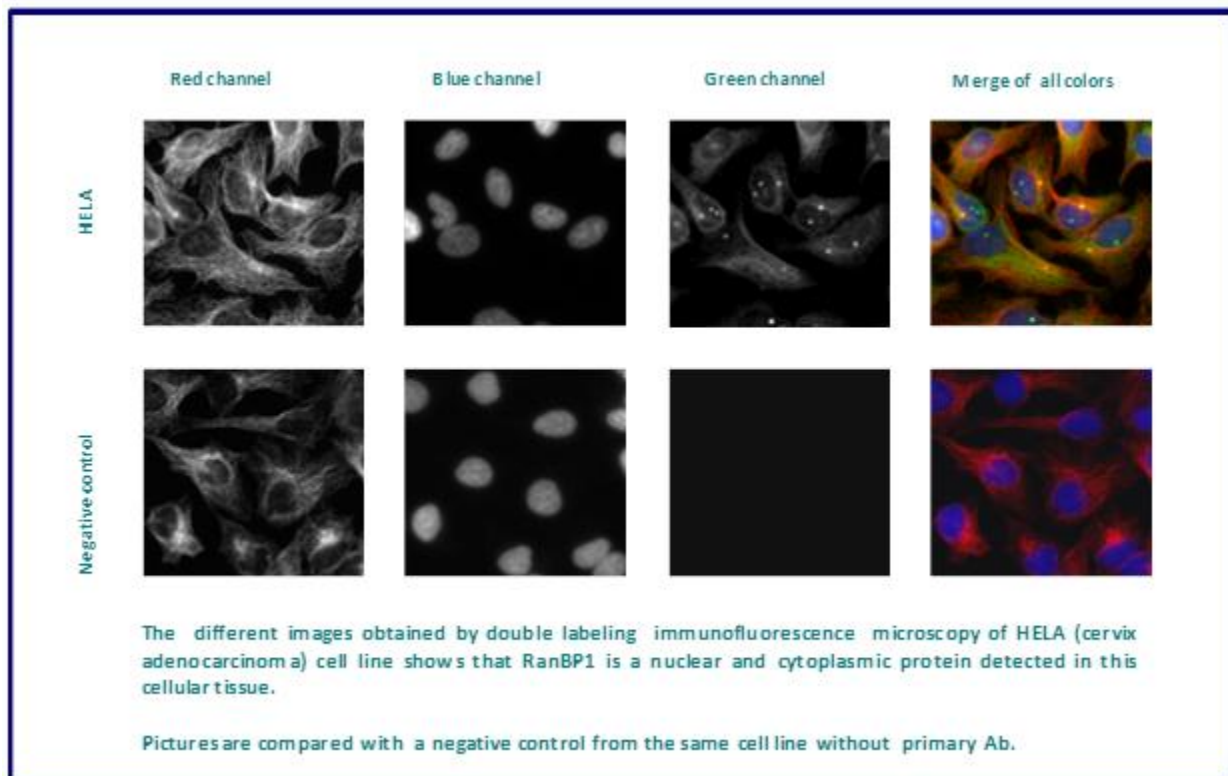
Immunofluorescence analysis of Ran-specific GTPase-activating protein3 (RanBP1) expression in 6 cells lines (HELA, 293T/17, Capan-2, SAOS-2, SH-SY5Y, Skin 3,44). The crude serum ENSG00000099901 has been tested at 1/500.

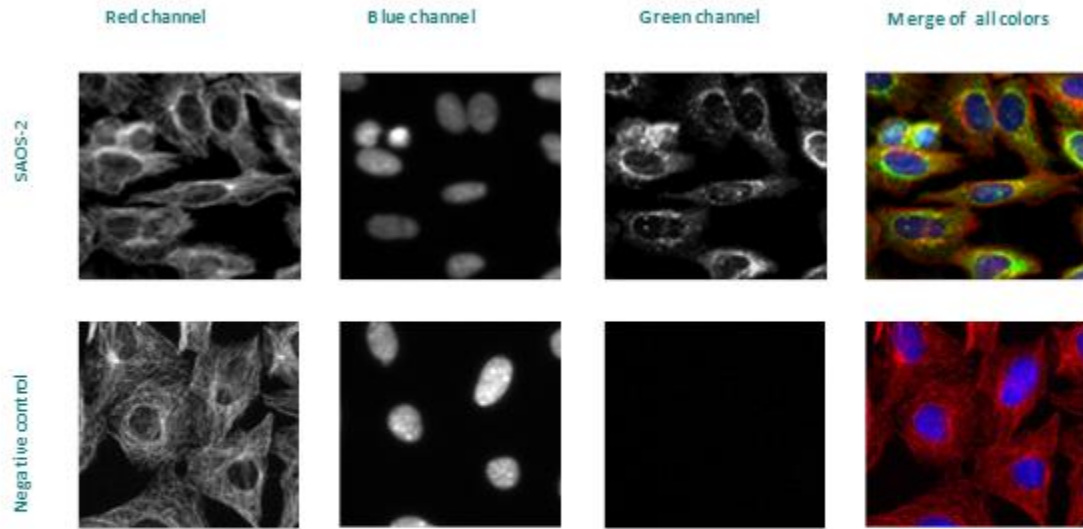
Red staining : cytoskeleton (microtubules/ α -tubuline)

Blue staining : nucleus (Hoechst)

Green staining : anti- RanBP1 antibody

Expected subcellular location : Cytoplasm





The different images obtained by double labeling immunofluorescence microscopy of SAOS-2 (osteosarcoma) cell line shows that RanBP1 is a nuclear and cytoplasmic 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 and cytoplasmic distribution.