# abcam

## Product datasheet

# Recombinant Human C19orf2 protein ab81853

**Description** 

Product name Recombinant Human C19orf2 protein

Purity > 95 % SDS-PAGE.

Expression system Escherichia coli

Protein length Full length protein

Animal free No

Nature Recombinant

**Species** Human

### **Specifications**

Our Abpromise guarantee covers the use of ab81853 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications SDS-PAGE

Form Liquid

#### **Preparation and Storage**

**Stability and Storage** Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.

pH: 7.9

 $Constituents: 0.75\%\ Potassium\ chloride,\ 0.0154\%\ DTT,\ 0.316\%\ Tris\ HCl,\ 0.00584\%\ EDTA,\ 20\%$ 

Glycerol (glycerin, glycerine)

#### **General Info**

**Function** Involved in gene transcription regulation. Acts as a transcriptional repressor in concert with the

corepressor UXT to regulate androgen receptor (AR) transcription. May act as a tumor suppressor to repress AR-mediated gene transcription and to inhibit anchorage-independent growth in prostate cancer cells. Required for cell survival in ovarian cancer cells. Together with UXT, associates with chromatin to the NKX3-1 promoter region. Antagonizes transcriptional

modulation via hepatitis B virus X protein.

Plays a central role in maintaining S6K1 signaling and BAD phosphorylation under normal growth

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conditions thereby protecting cells from potential deleterious effects of sustained S6K1 signaling. The URI1-PPP1CC complex acts as a central component of a negative feedback mechanism that counteracts excessive S6K1 survival sigaling to BAD in response to growth factors. Mediates inhibition of PPP1CC phosphatase activity at mitochondria. Coordinates the regulation of nutrient-sensitive gene expression availability in a mTOR-dependent manner. Seems to be a scaffolding protein able to assemble a prefoldin-like complex that contains PFDs and proteins with roles in transcription and ubiquitination.

Tissue specificity

Ubiquitous. Expressed in ovarian cancers (at protein level). Expressed strongly in skeletal muscle.

Expressed weakly in brain, heart, pancreas and in prostate epithelial cells.

Sequence similarities

Belongs to the RNA polymerase II subunit 5-mediating protein family.

Post-translational modifications

Phosphorylated. Phosphorylation occurs essentially on serine residues. Phosphorylation occurs in response to androgen treatment in prostate cancer cells in a mTOR-dependent manner.

Phosphorylated; hyperhosphorylated in mitochondria in a mTORC-dependent signaling pathway. Phosphorylated at Ser-372 by RPS6KB1 in a growth factor- and rapamycin-dependent manner. S6K1-mediated mitochondrial phosphorylation at Ser-372 disrupts the URI1-PPP1CC complex in the mitochondrion, releaves PPP1CC phosphatase inhibition activity and hence engages a negative feedback diminishing RPS6KB1 kinase activity and preventing sustained S6K1-dependent signaling.

Cellular localization

Nucleus. Cytoplasm. Mitochondrion. Cell projection > dendrite. Colocalizes with PFDN2, PFDN4,

PPP1CC, RPS6KB1 and STAP1 at mitochondrion.

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