

Product datasheet for AP31837PU-N

OriGene Technologies, Inc.

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CTDSP1 Goat Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: ELISA, IHC, WB

Recommended Dilution: Peptide ELISA: 1/16000 (Detection Limit).

Western blot: 0.1-0.3 µg/ml. Approx 30kDa band observed in Mouse Testis lysates (calculated

MW of 29.3kDa according to Mouse NP_694728.1).

Reactivity: Bovine, Canine, Human, Mouse, Rat

Host: Goat

Clonality: Polyclonal

Immunogen: Peptide with sequence from the internal region of the protein sequence according to

NP_067021.1; NP_872580.1.

Specificity: This antibody is expected to recognise both reported isoforms (NP_067021 and NP_872580).

Formulation: Tris buffered saline, pH~7.3 containing 0.02% Sodium Azide as preservative and 0.5% BSA as

stabilizer

State: Aff - Purified

State: Liquid purified Ig fraction

Concentration: lot specific

Purification: Ammonium Sulphate Precipitation followed by antigen Affinity Chromatography using the

immunizing peptide

Conjugation: Unconjugated

Storage: Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

Gene Name: CTD small phosphatase 1

Database Link: Entrez Gene 227292 MouseEntrez Gene 363249 RatEntrez Gene 58190 Human

Q9GZU7





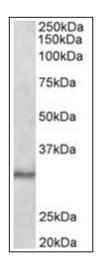
Background:

CTDSP1 is a class 2C phosphatase with activity dependent on the conserved DxD motif. Expression of CTDSP1 inhibited activated transcription from several promoter-reporter gene constructs, but expression of a mutant lacking phosphatase activity enhanced transcription. Neuronal gene transcription is repressed in nonneuronal cells by the repressor element-1 (RE1)-silencing transcription factor/neuron-restrictive silencer factor (REST/NRSF; 600571) complex. REST/NRSF recruits SCPs to neuronal genes that contain RE1 elements, leading to neuronal gene silencing in nonneuronal cells. Phosphatase-inactive forms of SCP interfere with REST/NRSF function and promote neuronal differentiation of P19 stem cells. Likewise, small interfering RNA directed to the single Drosophila SCP unmasks neuronal gene expression in S2 cells. Thus, SCP activity is an evolutionarily conserved transcriptional regulator that acts globally to silence neuronal genes.

Synonyms: NIF3, NLIIF, SCP1, NLI-interacting factor 3, NLI-IF

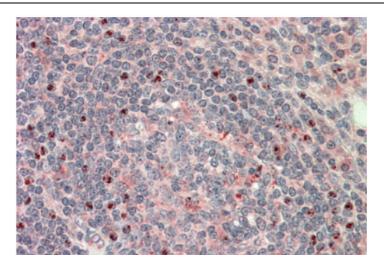
Protein Families: Phosphatase

Product images:



Staining of Mouse Testis lysate (35ug protein in RIPA buffer) using CTDSP1 Antibody at 0.1 ug/ml. Primary incubation was 1 hour. Detected by chemiluminescence.





Staining of paraffin embedded Human Tonsil using CTDSP1 Antibody at 5 ug/ml. Steamed antigen retrieval with citrate buffer pH 6, APstaining.