

## Product datasheet for **TA302078**

### CTDSP1 Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	WB: 1:1000, IHC: 1:50~100
Reactivity:	Human (Predicted: Mouse)
Host:	Rabbit
Isotype:	Ig
Clonality:	Polyclonal
Immunogen:	This CTDSP1-V250 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 235-261 amino acids from the C-terminal region of human CTDSP1-V250.
Formulation:	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.
Concentration:	lot specific
Purification:	This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	29203 Da
Gene Name:	CTD small phosphatase 1
Database Link:	<a href="#">NP_872580</a> <a href="#">Entrez Gene 227292 Mouse</a> <a href="#">Entrez Gene 58190 Human</a> <a href="#">Q9GZU7</a>



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**Background:**

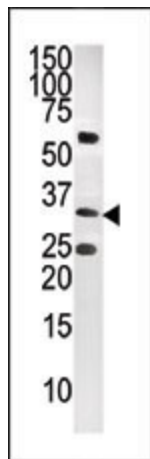
CTDSP1 is a class 2C phosphatase with activity dependent on the conserved DxD motif. Expression of CTDSP1 inhibited activated transcription from several promoter-reporter gene constructs, but expression of a mutant lacking phosphatase activity enhanced transcription. Neuronal gene transcription is repressed 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:**

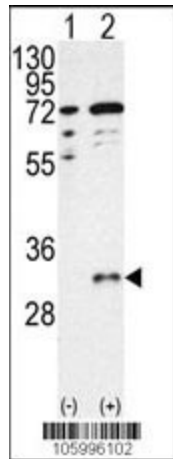
NIF3; NLI-IF; NLIIF; SCP1

**Protein Families:**

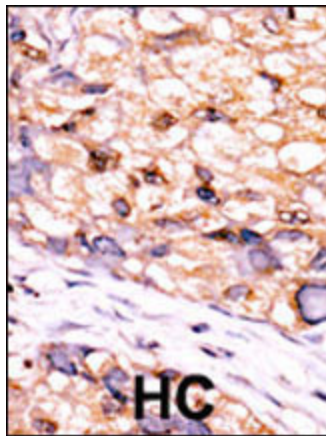
Phosphatase

**Product images:**

The anti-CTDSP1-V250 (Cat. #TA302078) is used in Western blot to detect CTDSP1-V250 in CEM tissue lysate.



Western blot analysis of CTDSP1 (arrow) using CTDSP1-V250 Antibody (C-term) (Cat.#TA302078). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the CTDSP1 gene (Lane 2) (Origene Technologies).



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.