#### For Research Use Only

# CTDSP2 Polyclonal antibody

Catalog Number: 11116-1-AP



**Basic Information** 

**Applications** 

Catalog Number:

11116-1-AP

BC065920

Size:

500 µg/ml

10106

Source:

Rabbit

Cottype:

GenBank Accession Number:

BC065920

GeneID (NCBI):

10106

UNIPROT ID:

014595

Full Name:

IgG CTD (carboxy-terminal domain, RNA polymerase II, polypeptide A) small

AG1601 phosphatase 2
Calculated MW:
31 kDa
Observed MW:

31 kDa

Tested Applications: IHC, WB,ELISA
Species Specificity:

human, mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB: human kidney tissue, HepG2 cells, K-562 cells

**Purification Method:** 

WB 1:200-1:1000 IHC 1:20-1:200

Antigen affinity purification

Recommended Dilutions:

IHC: human pancreas cancer tissue,

## **Background Information**

CTDSPs are C-class phosphatases that act on Ser 5 of the Pol II C-terminal domain (CTD) to decrease transcription [PMID:15681389]. CTDSP enzymatic activity is required for REST function, and knockdown of CTDSP induces the neuronal differentiation of mouse embryonic carcinoma P19 cells. CTDSP2 has been shown to enhance TGF-  $\beta$  signaling by the dephosphorylation of SMAD proteins and attenuates androgen receptor-mediated transcription [PMID:16724108]. It negatively regulates RNA polymerase II transcription by controlling the transition from initiation/capping to processive transcript elongation. It was recruited by REST to neuronal genes that contain RE-1 elements, leading to neuronal gene silencing in non-neuronal cells[PMID: 12721286].

### Storage

#### Storage:

Store at -20°C. Stable for one year after shipment. Storage Buffer:

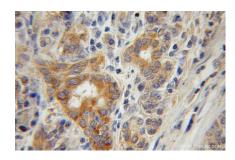
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

# Selected Validation Data



human kidney tissue were subjected to SDS PAGE followed by western blot with 11116-1-AP (CTDSP2 antibody) at dilution of 1:400 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded human pancreas cancer using 11116-1-AP (CTDSP2 antibody) at dilution of 1:50 (under 10x lens).