## For Research Use Only

## Spartan Polyclonal antibody

Catalog Number: 24850-1-AP



**Purification Method:** 

WB 1:500-1:1000

protein lysate

Antigen affinity purification

IP 0.5-4.0 ug for 1.0-3.0 mg of total

Recommended Dilutions:

**Basic Information** 

Catalog Number: GenBank Accession Number:

24850-1-AP BC015740 GeneID (NCBI): 150ul, Concentration: 500 ug/ml by 83932

Nanodrop: **UNIPROT ID:** Q9H040 Rabbit Full Name:

Isotype: DNA-dependent metalloprotease

SPRTN IgG

Immunogen Catalog Number: Calculated MW: AG20586 489 aa. 55 kDa Observed MW:

55 kDa, 65 kDa

**Applications** 

**Tested Applications:** Positive Controls:

WB, IP, ELISA WB: human placenta tissue, Species Specificity: IP: HEK-293 cells,

human

## **Background Information**

Spartan (Protein with SprT-like domain at the N terminus), also known as DVC1 or C1orf124, is a replication-coupled DNA-dependent metalloprotease that cleaves proteins cross-linked to DNA to promote DPC repair (PMID: 38600235). Spartan protease activity is stimulated by DNA binding, while posttranslational modification of Spartan governs both its protease activity and recruitment to the DPC on chromatin (PMID: 27871366). The regulation of Spartan includes a ubiquitin switch (where deubiquitination activates its proteolytic activity), and acetylation and phosphorylation switches (which facilitate DNA binding). The calculated molecular weight of Spartan is 55 kDa, while the 65-kDa band could be due to posttranslational modification (PMID: 33567341, 31316063).

Storage

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

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

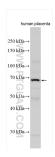
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

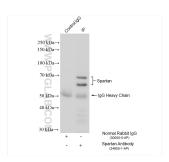
in USA), or 1(312) 455-8498 (outside USA)

E: proteintech@ptglab.com W: ptglab.com

## Selected Validation Data



human placenta tissue were subjected to SDS PAGE followed by western blot with 24850-1-AP (Spartan antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours.



IP result of anti-Spartan (IP:24850-1-AP, 4ug; Detection:24850-1-AP 1:500) with HEK-293 cells lysate 1800 ug.