

# Spartan Polyclonal antibody

Catalog Number: 24850-1-AP

## Basic Information

**Catalog Number:**

24850-1-AP

**Size:**

500 µg/ml

**Source:**

Rabbit

**Isotype:**

IgG

**Immunogen Catalog Number:**

AG20586

**GenBank Accession Number:**

BC015740

**GeneID (NCBI):**

83932

**UNIPROT ID:**

Q9H040

**Full Name:**

DNA-dependent metalloprotease

SPRTN

**Calculated MW:**

489 aa, 55 kDa

**Observed MW:**

55 kDa, 65 kDa

**Purification Method:**

Antigen affinity purification

**Recommended Dilutions:**

WB 1:500-1:1000

IP 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate

## Applications

**Tested Applications:**

WB, IP, ELISA

**Species Specificity:**

human

**Positive Controls:**

WB : human placenta tissue,

IP : HEK-293 cells,

## 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

**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

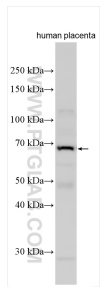
For technical support and original validation data for this product please contact:

T: 4006900926

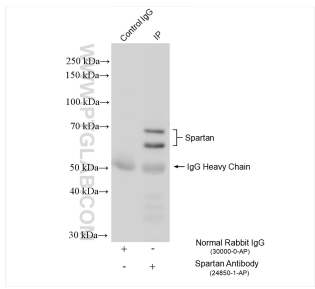
E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)W: [ptgcn.com](http://ptgcn.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

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.