

Rabbit Anti-CD2AP/AP Conjugated antibody

SL0512R-AP

Product Name Anti-CD2AP/AP

Chinese Name 碱性磷酸酶（AP）标记的白 Cell differentiation 抗原 CD2AP 抗体

Alias CD2-associated protein; Adapter protein CMS; AL024079; Cas ligand with multiple SH3 domains; C78928; Cd2ap; CMS; Mesenchyme to epithelium transition protein with SH3 domains 1; METS 1; Mets1; CD2AP_HUMAN.

Research Area Signal transduction Transporter Binding protein

Immunogen Species Rabbit

Clonality Polyclonal

React Species Mouse,Rat(predicted:Human,Chicken,Dog,Pig,Cow,Horse,Rabbit,Sheep,GuineaPig)
WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500

Applications not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.

Molecular weight 71kDa

Form Lyophilized or Liquid

Concentration 1mg/ml

immunogen KLH conjugated synthetic peptide derived from human CD2AP

Lsotype IgG

Purification affinity purified by Protein A

Storage Buffer 1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.

Storage Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Product Detail **background:**
This gene encodes a scaffolding molecule that regulates the actin cytoskeleton. The protein directly interacts with filamentous actin and a variety of cell membrane proteins through multiple actin binding sites, SH3 domains, and a proline-rich region containing binding sites for SH3 domains. The cytoplasmic protein localizes to

membrane ruffles, lipid rafts, and the leading edges of cells. It is implicated in dynamic actin remodeling and membrane trafficking that occurs during receptor endocytosis and cytokinesis. Haploinsufficiency of this gene is implicated in susceptibility to glomerular disease. [provided by RefSeq, Jul 2008].

Function:

Seems to act as an adapter protein between membrane proteins and the actin cytoskeleton. May play a role in receptor clustering and cytoskeletal polarity in the junction between T-cell and antigen-presenting cell. May anchor the podocyte slit diaphragm to the actin cytoskeleton in renal glomerulus. Also required for cytokinesis.

Subunit:

Self-associates. Homodimer (Potential). Interacts with F-actin, PKD2, NPHS1 and NPHS2. Interacts with WTIP. Interacts with DDN; interaction is direct. Interacts (via SH3 2 domain) with CBL (via phosphorylated C-terminus). Interacts with BCAR1/p130Cas (via SH3 domain). Interacts with MVB12A and ARHGAP17. Interacts with ANLN, CD2 and CBLB. Interacts with PDCD6IP and TSG101. Interacts with RIN3.

Subcellular Location:

Cytoplasm, cytoskeleton. Cell projection, ruffle. Note=Colocalizes with F-actin and BCAR1/p130Cas in membrane ruffles. Located at podocyte slit diaphragm between podocyte foot processes. During late anaphase and telophase, concentrates in the vicinity of the midzone microtubules and in the midbody in late telophase.

Tissue Specificity:

Widely expressed in fetal and adult tissues.

Post-translational modifications:

Phosphorylated on tyrosine residues; probably by c-Abl, Fyn and c-Src.

DISEASE:

Focal segmental glomerulosclerosis 3 (FSGS3) [MIM:607832]: A renal pathology defined by the presence of segmental sclerosis in glomeruli and resulting in proteinuria, reduced glomerular filtration rate and progressive decline in renal function. Renal insufficiency often progresses to end-stage renal disease, a highly morbid state requiring either dialysis therapy or kidney transplantation. Note=Disease susceptibility is associated with variations affecting the gene represented in this entry.

Similarity:

Contains 3 SH3 domains.

Database links:

[Entrez Gene: 23607](#) Human

[Entrez Gene: 12488](#) Mouse

[Entrez Gene: 316258](#) Rat

[Omim: 604241](#) Human

[SwissProt: Q9Y5K6](#) Human

[SwissProt: Q9JLQ0](#) Mouse

[Unigene: 485518](#) Human

[Unigene: 218637](#) Mouse

[Unigene: 212220](#) Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

CD2AP 可能作为细胞裂孔隔膜分子与 Cytoskeleton 的连接蛋白，在 Cell differentiation 即增殖的过程中发挥重要作用。

目前主用于肾脏功能方面的研究，D2AP 不仅参与 T 细胞的活化，而且对肾脏功能起着至关重要的作用，其异常表达可能是引起人类肾脏疾病的诱因之一。