

Rabbit Anti-PAG1 antibody

SL13695R

Product Name:	PAG1
Chinese Name:	跨膜接头蛋白PAG抗体
Alias:	CBP; Csk Binding Protein; Csk-binding protein; FLJ37858; MGC138364; PAG 1; PAG; PAG1; PAG1_HUMAN; Phosphoprotein associated with glycosphingolipid enriched microdomains 1; Phosphoprotein associated with glycosphingolipid enriched microdomains; Phosphoprotein associated with glycosphingolipid microdomains 1; Phosphoprotein associated with glycosphingolipid-enriched microdomains 1; Phosphoprotein associated with glycosphingolipid-enriched microdomains 1; Phosphoprotein associated with glycosphingolipid-enriched microdomains 1; Phosphoprotein associated with glycosphingolipid Enriched microdomains 1; Protein Associated with Glycosphingolipid Enriched Microdomains; Transmembrane adapter protein PAG; Transmembrane phosphoprotein Cbp.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Horse,Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100- 500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	47kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human PAG1:331-432/432
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% 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 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	The Src family of protein tyrosine kinases (Src-PTKs) is important in the regulation of

growth and differentiation of eukaryotic cells. The activity of Src-PTKs in cells of different types is negatively controlled by Csk. Csk binding protein (Cbp), also designated phosphoprotein associated with glycosphingo-lipid-enriched microdomains (GEMs) or PAG, is a ubiquitously expressed transmembrane phosphoprotein that binds specifically to the SH2 domain of Csk. Cbp is involved in the membrane localization of Csk and in Csk-mediated inhibition of c-Src. In the plasma membrane, Cbp is exclusively localized in the GM1 ganglioside-enriched detergent-insoluble membrane domain, which is important in receptor-mediated signaling. Cbp is a component of the regulatory mechanism controlling the activity of membrane-associated Src-PTKs.

Function:

Negatively regulates TCR (T-cell antigen receptor)-mediated signaling in T-cells and FCER1 (high affinity immunoglobulin epsilon receptor)-mediated signaling in mast cells. Promotes CSK activation and recruitment to lipid rafts, which results in LCK inhibition. Inhibits immunological synapse formation by preventing dynamic arrangement of lipid raft proteins. May be involved in cell adhesion signaling.

Subcellular Location: Cell membrane. Present in lipid rafts.

Tissue Specificity:

Ubiquitously expressed. Present in germinal center B-cells, plasma cells, T-cells, monocytes and platelets (at protein level).

Post-translational modifications:

Palmitoylated.

Phosphorylated by FYN on Tyr-317 in resting T-cells; which promotes interaction with CSK. Dephosphorylated by PTPRC/CD45 upon TCR activation; which leads to CSK dissociation. May also be dephosphorylated by PTPN11. Hyperphosphorylated in mast cells upon FCER1 activation.

SWISS: Q9NWQ8

Gene ID: 55824

Database links:

Entrez Gene: 55824 Human

Entrez Gene: 94212 Mouse

<u>Omim: 605767</u> Human

SwissProt: Q9NWQ8 Human





Paraformaldehyde-fixed, paraffin embedded (Rat small intestine); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Phosphoprotein associated with glycosphingolipid enriched microdomains 1; PAG1) Polyclonal Antibody, Unconjugated (SL13695R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.