ARG63085
anti-PAG / Cbp antibody

Package: 100 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes PAG / Cbp
Tested Reactivity	Hu, Ms
Tested Application	IHC-P, IP, WB
Specificity	The polyclonal antibody recognizes Cskbinding protein (Cbp / PAG), a 46 kDa ubiquitously expressed transmembrane adaptor protein present in membrane rafts (glycosphingolipidenriched microdomains), which however migrates on SDS PAGE gels anomalously as an 80 kDa molecule.
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	PAG / Cbp
Species	Human
Immunogen	Recombinant intracellular fragment (aa 97-432) of human Cbp (PAG).
Conjugation	Un-conjugated
Alternate Names	Transmembrane phosphoprotein Cbp; Csk-binding protein; CBP; PAG; Transmembrane adapter protein PAG; Phosphoprotein associated with glycosphingolipid-enriched microdomains 1

Application Instructions

Application table

Application	Dilution
IHC-P	Assay-dependent
IP	Assay-dependent
WB	Assay-dependent

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Positive Control: IHC-P: Tonsil and colon germinal center.

Properties

Form	Liquid
Purification	Purified from rabbit serum by precipitation methods.
Purity	> 95% (by SDS-PAGE)
Buffer	PBS (pH 7.4) and 15 mM Sodium azide
Preservative	15 mM Sodium azide
Concentration	1 mg/ml

Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 55824 Human GeneID: 94212 Mouse Swiss-port # Q3U1F9 Mouse Swiss-port # Q9NWQ8 Human
Gene Symbol	PAG1
Gene Full Name	phosphoprotein membrane anchor with glycosphingolipid microdomains 1
Background	PAG (phosphoprotein associated with GEMs), also known as Cbp (Csk-binding protein), is a ubiquitously expressed 46 kDa transmembrane adaptor protein present in membrane rafts (glycosphingolipid-enriched microdomains), which however migrates on SDS PAGE gels anomalously as an 80 kDa molecule. Following tyrosine phosphorylation by Src family kinases, PAG binds and thereby activates the protein tyrosine kinase Csk, the major negative regulator of the Src family kinases. Signaling via the B-cell receptor in B cells or high affinity IgE receptor (FcepsilonRI) in mast cells leads to PAG increased tyrosine phosphorylation and Csk binding, while T cell receptor signaling causes PAG dephosphorylation, loss of Csk binding and increased activation of the protein tyrosine kinase Lck.
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. [UniProt]
Research Area	Signaling Transduction antibody
Calculated Mw	47 kDa
PTM	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. Phosphorylated by LYN.