

Product datasheet

info@arigobio.com

ARG63084 anti-PAG / Cbp antibody [MEM-255]

Package: 100 μg Store at: -20°C

Summary

Product Description Mouse Monoclonal antibody [MEM-255] recognizes PAG / Cbp

Tested Reactivity Hu

Species Does Not React With Ms, Rat, Bov

Tested Application FACS, IHC-P, WB

Specificity The clone MEM-255 recognizes an epitope (aa 235-280) of Csk-binding protein (Cbp) located in the

cytoplasmic domain, also known as protein associated with glycosphingolipid-enriched microdomains

(PAG).

Host Mouse

Clonality Monoclonal

Clone MEM-255

Isotype IgG2a

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
	FACS	2 μg/ml
	IHC-P	Assay-dependent
	WB	Assay-dependent
	FACS: Intracellular staining, permeabilization required. WB: Csk binding protein is an ubiquitously expressed 46 kDa transmembrane adaptor protein present in membrane microdomains (rafts), which however migrates on SDS-PAGE gels anomalously as an 80 kDa molecule. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	IHC-P: Tonsil and spleen	

Properties

Form	Liquid	
Purification	Purified from ascites by protein-A affinity chromatography.	

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 <u>GeneID: 55824 Human</u>

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

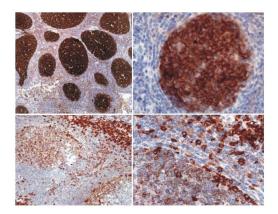
PTM Palmitoylated.

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

 $dephosphory lated \ by \ PTPN11. \ Hyperphosphory lated \ in \ mast \ cells \ upon \ FCER1 \ activation.$

Phosphorylated by LYN.



ARG63084 anti-PAG / Cbp antibody [MEM-255] IHC-P image

Immunohistochemistry: Lymph node lymphoid follicle and follicular lymphoma sections stained with ARG63084 anti-PAG / Cbp antibody [MEM-255].

Cbp/PAG is also expressed more weakly in T cells in tonsil and the thymic medulla.