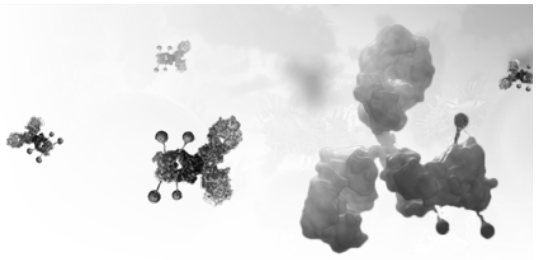

Mouse Anti-GAPDH monoclonal antibody, clone 2.5 (CABT-RM163)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Specificity	Specifically detects Glyceraldehyde-3-phosphate dehydrogenase in Plasmodium falciparum. It targets an epitope within the N-terminal half.
Target	GAPDH
Immunogen	His-tagged full length recombinant Glyceraldehyde-3-phosphate dehydrogenase from Plasmodium falciparum.
Isotype	IgG1, λ
Source/Host	Mouse
Species Reactivity	Plasmodium falciparum
Clone	2.5
Purification	Protein G purified
Conjugate	unconjugated
Applications	IF, WB
Molecular Weight	~37 kDa observed; 36.63 kDa calculated. Uncharacterized bands may be observed in some lysate(s).
Format	Liquid
Size	100 µg
Buffer	0.1 M Tris-Glycine (pH 7.4), 150 mM NaCl

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Preservative	0.05% sodium azide
Storage	Stable for 1 year at 2-8°C from date of receipt.

BACKGROUND

Introduction	Glyceraldehyde-3-phosphate dehydrogenase is encoded by the PF3D7_1462800 gene in Plasmodium falciparum. GAPDH is a ubiquitous glycolytic house-keeping enzyme that catalyzes the synthesis of 1,3-biphosphoglycerate. In mammalian cells, besides its cytoplasmic action in metabolism it is also involved in the initial stages of apoptosis or oxidative stress response where GAPDH is translocated to the nucleus. GADPH from Plasmodium falciparum (pfGAPDH) is reported to participate in functions other than glycolysis. Here GAPDH exerts non-glycolytic function(s), including a role in vesicular transport and biogenesis of apical organelles. In Plasmodium falciparum it is partially segregated in the late stages of parasite development from the cytosol that suggests additional non-glycolytic function(s) of this enzyme. It is shown to be recruited to HeLa cell microsomal membranes in response to mammalian GTPase Rab2. The N -Terminal fragment of pfGAPDH is shown to bind to microsomal membranes in response to Rab2 and competitively inhibit Rab-2 stimulated pfGAPDH recruitment.
Keywords	glyceraldehyde-3-phosphate dehydrogenase; GAPD; Peptidyl-cysteine S-nitrosylase GAPDH; aging-associated gene 9 protein; G3PD; glyceraldehyde 3-phosphate dehydrogenase

GENE INFORMATION

Entrez Gene ID	812180
UniProt ID	Q8IKK7

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