

Product datasheet for **TA396756**

GAPDH Mouse Monoclonal Antibody [Clone ID: 33F2.C8.G6.E3]

Product data:

Product Type:	Primary Antibodies
Clone Name:	33F2.C8.G6.E3
Applications:	ELISA, IF, IHC, IP, WB
Recommended Dilution:	WB: 1:1,000 IHC: User Optimized IF: 1:100 ELISA: User Optimized
Reactivity:	Human, Rabbit, Mouse
Host:	Mouse
Isotype:	IgM
Clonality:	Monoclonal
Immunogen:	Anti-GAPDH Monoclonal Antibody was produced by repeated immunizations in mice with rabbit GAPDH protein.
Specificity:	Anti-GAPDH Monoclonal Antibody is directed against rabbit Glyceraldehyde-3-Phosphate Dehydrogenase. The antibody is a total IgM fraction prepared from ascites fluid by selective precipitation and tandem molecular sieve chromatography followed by extensive dialysis against the buffer stated above. Anti-GAPDH antibodies are expected to react with the following species based on 100% sequence homology: rabbit, human, and mouse. Reactivity against other sources is not known.
Formulation:	0.1 M Tris Chloride, 0.5 M Sodium Chloride, pH 8.0
Concentration:	1.0 mg/ml - lot specific
Conjugation:	Unconjugated
Storage:	Store vial at -20° C prior to opening. This product is stable at 4° C as an undiluted liquid. For extended storage, aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Dilute only prior to immediate use.
Stability:	Expiration date is one (1) year from date of receipt.
Database Link:	Entrez Gene 100009074 Rabbit P46406



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Background:

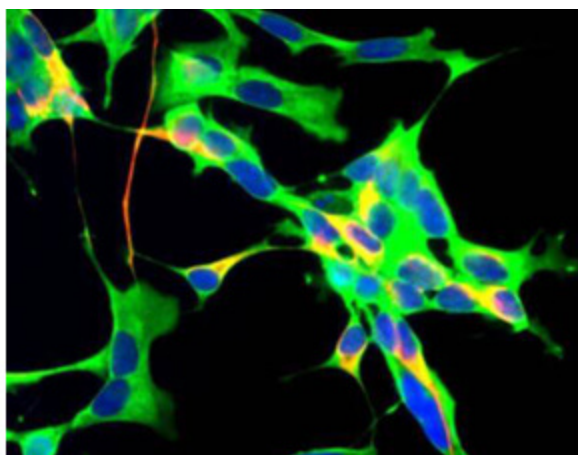
GAPDH Loading Control Monoclonal Antibody detects Glyceraldehyde-3-Phosphate Dehydrogenase. GAPDH is a metabolic enzyme responsible for catalyzing one step in the glycolytic pathway, the reversible oxidative phosphorylation of glyceraldehyde 3-phosphate. Because GAPDH is a protein expressed in large amounts and which is required at all times for important "house keeping" functions, levels of GAPDH mRNA are often measured and used as standards in studies of mRNA expression. Increasingly, scientists are making use of specific antibodies to GAPDH in comparable studies of levels of protein expression. Apart from a role in glycolysis, GAPDH may have other roles such as in the activation of transcription. GAPDH is reported to bind to a variety of other proteins, including the amyloid precursor protein, mutations in which cause some forms of Alzheimer's disease, and the polyglutamine tracts of Huntingtin, the protein product aberrant forms of which are causative of Huntington's disease. Associations with actin and tubulin have also been reported. The protein may also have a role in the regulation of apoptosis, and interestingly migrates from the cytoplasm into the nucleus when cells become apoptotic. Anti-GAPDH antibody is widely used as a loading control for western blotting experiments, allowing comparison between the level of this protein and others in a cell or tissue and is ideal for Neuroscience, Cell Signaling and Cancer Research.

Synonyms:

mouse anti-GAPDH antibody, Loading Control Antibody, G3PDH, GAPD, Glyceraldehyde-3-phosphate dehydrogenase, Peptidyl-cysteine S-nitrosylase GAPDH

Note:

Anti-GAPDH (Mouse) has been tested in ELISA and western blot. This product is suitable in IHC and IF. Specific conditions should be optimized by the end user. Expect a band of ~38kDa in size corresponding to Glyceraldehyde 3-Phosphate Dehydrogenase protein by Western blot in the appropriate cell lysate or extract.

Product images:


Immunofluorescence Microscopy of Mouse Anti-Glyceraldehyde 3-Phosphate Dehydrogenase Antibody. Tissue: Human neuroblastoma SH-SY5Y cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: GAPDH antibody at 10 µg/mL for 1 h at RT. Secondary antibody: Fluorescein mouse secondary antibody at 1:10,000 for 45 min at RT. Localization: GAPDH is cytoplasmic. Staining: Anti-GAPDH (green), chicken antibody to neurofilament NF-H (red) and DNA (blue).