

Product datasheet for **TA336621**

GAPDH Mouse Monoclonal Antibody [Clone ID: 1D4]

Product data:

Product Type:	Primary Antibodies
Clone Name:	1D4
Applications:	IF, WB
Recommended Dilution:	WB: 1:1000, IF: 1:100
Reactivity:	Human, Mouse, Rat, Bovine, Chicken, Hamster, Avian
Host:	Mouse
Isotype:	IgM, kappa
Clonality:	Monoclonal
Immunogen:	Purified porcine GAPDH [UniProt# P00355]
Formulation:	Preservative: 0.1% Sodium Azide. Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Concentration:	lot specific
Purification:	Tissue culture supernatant
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	38 kDa
Gene Name:	glyceraldehyde-3-phosphate dehydrogenase
Database Link:	NP_002037 Entrez Gene 14433 Mouse Entrez Gene 24383 Rat Entrez Gene 2597 Human P04406



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Background:

GAPDH, also known as Glyceraldehyde 3-Phosphate Dehydrogenase is a 146 kDa tetramer composed of four 30-40 kDa subunits. GAPDH is a metabolic enzyme responsible for catalyzing one step in the glycolytic pathway, the reversible oxidative phosphorylation of glyceraldehyde 3-phosphate. Levels of GAPDH mRNA are commonly used as standards in mRNA expression studies. GAPDH is highly expressed due to its role in many housekeeping functions. Increasingly, scientists are making use of specific antibodies to GAPDH as loading controls for western blotting experiments. 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. 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.

Synonyms:

G3PD; GAPD; HEL-S-162eP

Note:

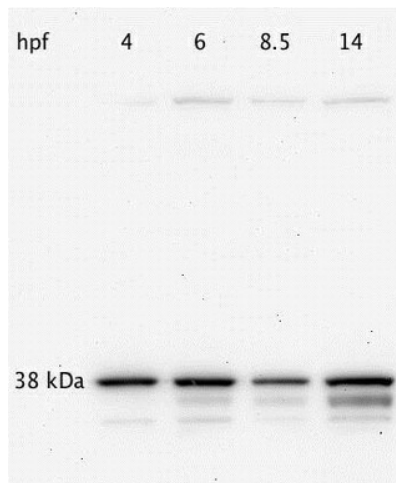
This GAPDH Antibody (1D4) is useful for Western blot and Immunocytochemistry/Immunofluorescence. Immunohistochemistry was reported in scientific literature. In WB a prominent band can be seen at approximately 38 kDa. This antibody makes an excellent loading control for Western blot experiments. Use in immunoprecipitation reported in scientific literature (PMID 24032460)

Protein Families:

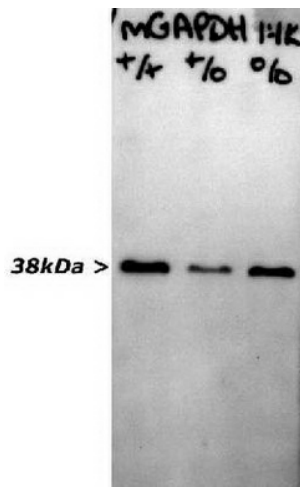
ES Cell Differentiation/IPS

Protein Pathways:

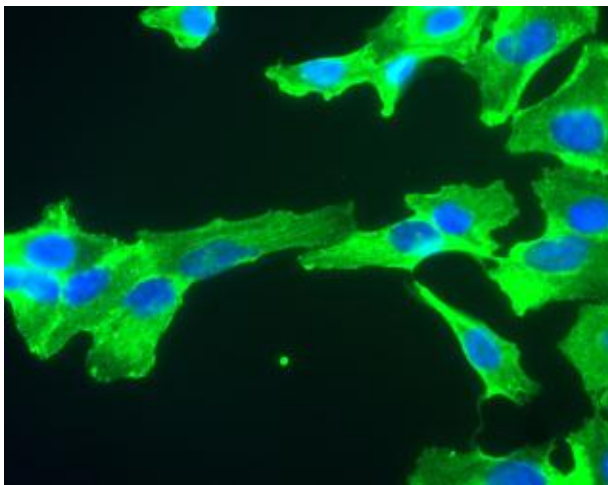
Alzheimer's disease, Glycolysis / Gluconeogenesis, Metabolic pathways

Product images:

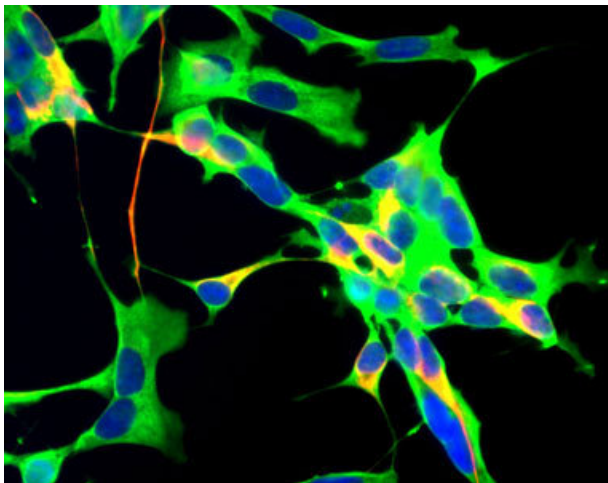
Western Blot: GAPDH Antibody (1D4) TA336621 - Zebrafish embryo lysates at different developmental stages probed with GAPDH monoclonal antibody 1D4. Data from confirmed customer review.



Western Blot: GAPDH Antibody TA336621 - Sciatic nerves of mouse wild type (+/+), heterozygous (+/o) and homozygous (o/o) for knockout of peripheral myelin protein 21 (PMP21) were homogenized in SDS-PAGE sample buffer and run for western blot. Blots were



Immunocytochemistry/Immunofluorescence: GAPDH Antibody (1D4) TA336621 - SH-SY5Y cells stained with GAPDH antibody TA336621 (green). Nuclear DNA is stained with Hoechst dye (blue).



Immunocytochemistry/Immunofluorescence: GAPDH Antibody TA336621 - SH-SY5Y cells stained with GAPDH antibody TA336621 (green) and Neurofilament Heavy antibody NB300-217 (red), counterstained with a fluorescent DNA probe (blue).