

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse and rat GAPDH/G3PDH in Western blots. In direct ELISAs, 100% cross-reactivity with recombinant mouse GAPDH/G3PDH and no cross-reactivity with recombinant human GAPDH-2 is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 686613
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human GAPDH/G3PDH Met1-Ala150 Accession # P04406
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunocytochemistry	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

GAPDH (Glyceraldehyde-3-phosphate dehydrogenase) is a 36-40 kDa member of the GAPDH family of enzymes. It is a widely expressed heterotetramer that is found in both the nucleus and cytoplasm. Although GAPDH was initially identified as a glycolytic enzyme that converted G3P into 1,3 diphosphoglycerate, it is now recognized to participate in no less than endocytosis, membrane fusion, vesicular secretory transport, DNA replication and repair, and apoptosis. Human GAPDH is 335 amino acids (aa) in length. There are two NAD binding sites (Asp35 and Asn316) with a catalytic region between aa 151-155. GAPDH contains no fewer than 19 posttranslational modifications, including methylation, deamidation and phosphorylation. One splice variant shows a 10 aa substitution for aa 319-335. Over aa 1-150, human GAPDH shares 92% aa identity with mouse GAPDH.

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