# **Anti-GAPDH Antibody [5-E10]**

### **EM1101**



Product Type: Mouse monoclonal IgM, primary antibodies

Species reactivity: Human, Mouse, Rat, Zebrafish, Rabbit

Applications: WB, IF-Cell

Molecular Wt: Predicted band size: 36 kDa

Clone number: 5-E10

**Description:** GAPDH (Glyceraldehyde-3-phosphate dehydrogenase) has both glyceraldehyde-3-

phosphate dehydrogenase and nitrosylase activities, thereby playing a role in glycolysis and nuclear functions, respectively. It participates in nuclear events including transcription, RNA transport, DNA replication and apoptosis. GAPDH is a key enzyme in glycolysis that catalyzes the first step of the pathway by converting D-glyceraldehyde 3-phosphate (G3P)

into 3-phospho-D-glyceroyl phosphate.

**Immunogen:** Synthetic peptide within human GAPDH aa 10-50.

Positive control: MDA-MB-231 cell lysate, HeLa cell lysate, MCF7 cell lysate, SK-Br-3 cell lysate, JAR cell

lysate, NIH/3T3 cell lysate, C2C12 cell lysate, PC-12 cell lysate, mouse kidney tissue

lysate, rat liver tissue lysate, F9, Hela, HepG2.

Subcellular location: Cytoplasm

Database links: SwissProt: P04406 Human | P16858 Mouse | P04797 Rat

**Recommended Dilutions:** 

WB 1:5,000-1:10,000 IF-Cell 1:200-1:500

**Storage Buffer:** 1\*PBS (pH7.4), 0.2% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Store at +4°C after thawing. Aliquot store at -20°C or -80°C. Avoid repeated freeze / thaw

cycles.

**Purity:** Protein L affinity purified.

## Hangzhou Huaan Biotechnology Co., Ltd.



Service mail:support@huabio.cn



#### **Images**

KDa M Red C C Y R WHO C O W A HINE CO WAY A CO W

Fig1: Western blot analysis of GAPDH on different lysates with Mouse anti-GAPDH antibody (EM1101) at 1/5,000 dilution.

Lane 1: MDA-MB-231 cell lysate (20 µg/Lane)

Lane 2: HeLa cell lysate (20 µg/Lane)

Lane 3: MCF7 cell lysate (20 µg/Lane)

Lane 4: SK-Br-3 cell lysate (20 µg/Lane)

Lane 5: JAR cell lysate (20 µg/Lane)

Lane 6: NIH/3T3 cell lysate (20 µg/Lane)

Lane 7: C2C12 cell lysate (20 µg/Lane)

Lane 8: PC-12 cell lysate (20 µg/Lane)

Lane 9: Mouse kidney tissue lysate (40 µg/Lane)

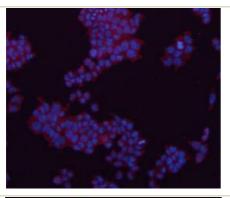
Lane 10: Rat liver tissue lysate (40 µg/Lane)

Predicted band size: 36 kDa Observed band size: 36 kDa

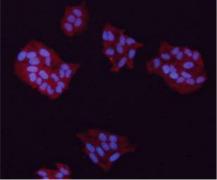
Exposure time: 1 minute 30 seconds;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (EM1101) at 1/5,000 dilution was used in 5% NFDM/TBST at room temperature for 2 hours. Goat Anti-Mouse IgG - HRP Secondary Antibody (HA1006) at 1/50,000 dilution was used for 1 hour at room temperature.



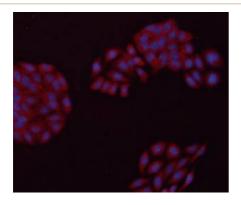
**Fig2:** ICC staining GAPDH in F9 cells (red). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



**Fig3:** ICC staining GAPDH in Hela cells (red). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

### Hangzhou Huaan Biotechnology Co., Ltd.





**Fig4:** ICC staining GAPDH in HepG2 cells (red). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

#### **Background References**

- 1. "The glyceraldehyde 3 phosphate dehydrogenase gene family: structure of a human cDNA and of an X chromosome linked pseudogene; amazing complexity of the gene family in mouse." Hanauer A., Mandel J.-L. EMBO J. 3:2627-2633(1983)
- 2. "Enhanced expression of a glyceraldehyde-3-phosphate dehydrogenase gene in human lung cancers." Tokunaga K., Nakamura Y., Sakata K., Fujimori K., Ohkubo M., Sawada K., Sakiyama S. Cancer Res. 47:5616-5619(1986)
- 3. "Glyceraldehyde-3-phosphate dehydrogenase is phosphorylated by protein kinase Ciota /lambda and plays a role in microtubule dynamics in the early secretory pathway." Tisdale E.J.J. Biol. Chem. 277:3334-3341(2001)