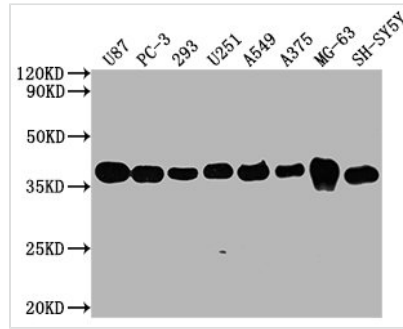




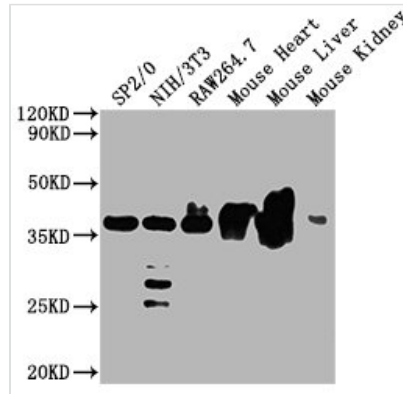
# GAPDH Monoclonal Antibody

<b>Product Code</b>	CSB-MA000071M2m
<b>Storage</b>	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
<b>Uniprot No.</b>	P04406
<b>Immunogen</b>	Recombinant Human GAPDH protein (2-335AA)
<b>Raised In</b>	Mouse
<b>Species Reactivity</b>	Human, Rat, Rabbit, Mouse
<b>Tested Applications</b>	ELISA, WB, IHC, IP, IF; Recommended dilution: WB: 1:5000-1:160000, IHC: 1:200-1:500, IF: 1:50-1:100, IP: 2µl-8µl
<b>Relevance</b>	<p>Glyceraldehyde 3-phosphate dehydrogenase (GAPDH or G3PDH) is an enzyme of 37kDa that is considered as a cellular enzyme involved in glycolysis. Glyceraldehyde-3-phosphate dehydrogenase (GAPDH) is a pleiotropic enzyme that is overexpressed in apoptosis and in several human chronic pathologies. Its role as a mediator for cell death has also been highlighted. At the molecular level, sequential steps lead to nuclear translocation of GAPDH during cell death as follows: first, a catalytic cysteine in GAPDH (C150 in rat GAPDH) is S-nitrosylated by nitric oxide (NO) that is generated from inducible nitric oxide synthase (iNOS) and/or neuronal NOS (nNOS); second, the modified GAPDH becomes capable of binding with Siah1, an E3 ubiquitin ligase, and stabilizes it; third, the GAPDH-Siah protein complex translocates to the nucleus, dependent on Siah1's nuclear localization signal, and degrades Siah1's substrates in the nucleus, which results in cytotoxicity. A recent report suggests that GAPDH may be genetically associated with late-onset of Alzheimer's disease.-deprenyl, which has originally been used as a monoamine oxidase inhibitor for Parkinson's disease, binds to GAPDH and displays neuroprotective actions.</p>
<b>Form</b>	Liquid
<b>Conjugate</b>	Non-conjugated
<b>Storage Buffer</b>	Preservative: 0.03% Proclin 300 Constituents: 50% Glycerol, 0.01M PBS, PH 7.4
<b>Purification Method</b>	>95%, Protein G purified
<b>Isotype</b>	IgG1
<b>Clonality</b>	Monoclonal
<b>Alias</b>	GAPDH; G3PD; GAPD; MGC88685
<b>Product Type</b>	Monoclonal Antibody
<b>Immunogen Species</b>	Human
<b>Target Names</b>	GAPDH
<b>Clone No.</b>	10H4D6
<b>Image</b>	



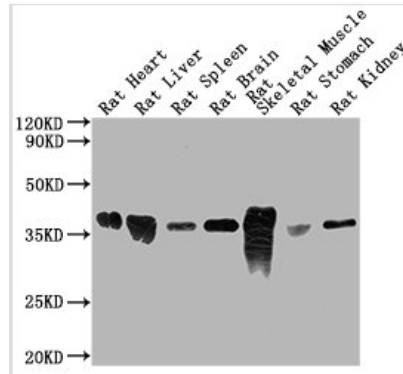
**Western Blot**

Positive WB detected in: U87 whole cell lysate, PC3 whole cell lysate, 293 whole cell lysate, U251 whole cell lysate, A549 whole cell lysate, MG-63 whole cell lysate, U251 whole cell lysate, SH-SY5Y whole cell lysate  
 All lanes GAPDH antibody at 1:5000  
 Secondary  
 Goat polyclonal to mouse IgG at 1/50000 dilution  
 Predicted band size: 36 KDa  
 Observed band size: 36 KDa  
 Exposure time: 5min



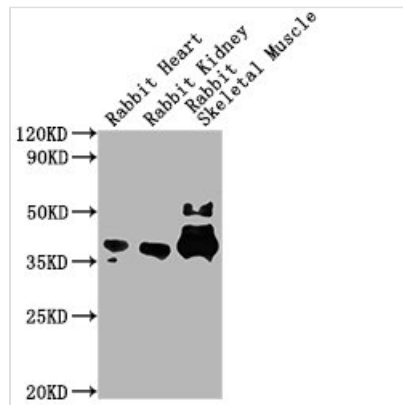
**Western Blot**

Positive WB detected in: SP2/0 whole cell lysate, NIH/3T3 whole cell lysate, Raw264.7 whole cell lysate, Mouse heart tissue, Mouse kidney tissue  
 All lanes GAPDH antibody at 1:5000  
 Secondary  
 Goat polyclonal to mouse IgG at 1/50000 dilution  
 Predicted band size: 36 KDa  
 Observed band size: 36 KDa  
 Exposure time: 5min



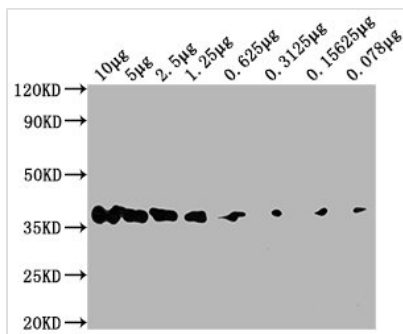
**Western Blot**

Positive WB detected in: Rat heart tissue, Rat liver tissue, Rat spleen tissue, Rat brain tissue, Rat skeletal tissue, Rat stomach tissue, Rat kidney tissue  
 All lanes GAPDH antibody at 1:5000  
 Secondary  
 Goat polyclonal to mouse IgG at 1/50000 dilution  
 Predicted band size: 36 KDa  
 Observed band size: 36 KDa  
 Exposure time: 5min



**Western Blot**

Positive WB detected in: Rabbit heart tissue, Rabbit kidney tissue, Rabbit skeletal muscle tissue  
 All lanes GAPDH antibody at 1:5000  
 Secondary  
 Goat polyclonal to mouse IgG at 1/50000 dilution  
 Predicted band size: 36 KDa  
 Observed band size: 36 KDa  
 Exposure time: 5min

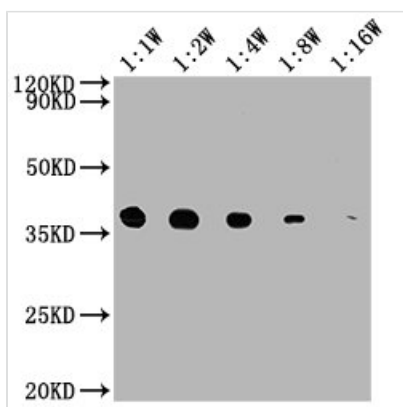


**Western Blot**

Positive WB detected in: HeLa whole cell lysate at 10µg, 5µg, 2.5µg, 1.25µg, 0.625µg, 0.3125µg, 0.15625µg, 0.078µg All lanes: GAPDH antibody at 1:5000

**Secondary**

Goat polyclonal to mouse IgG at 1/50000 dilution  
 Predicted band size: 36 KDa  
 Observed band size: 36 KDa  
 Exposure time: 5min

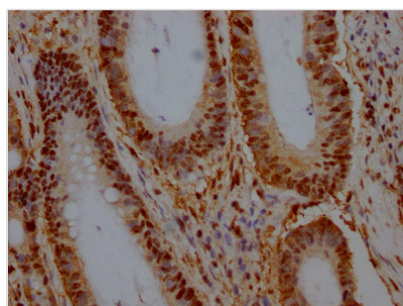


**Western Blot**

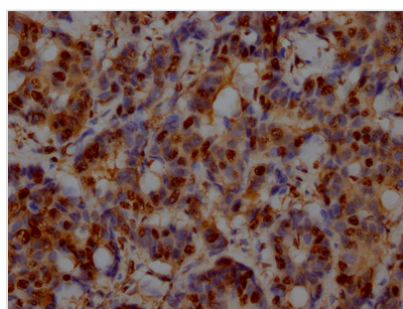
Positive WB detected in: 15µg HeLa whole cell lysate GAPDH antibody at 1:10000, 1:20000, 1:40000, 1:80000, 1:160000

**Secondary**

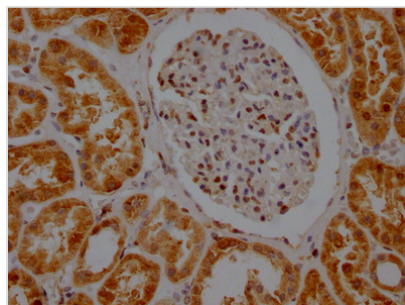
Goat polyclonal to mouse IgG at 1/50000 dilution  
 Predicted band size: 36 KDa  
 Observed band size: 36 KDa  
 Exposure time: 5min



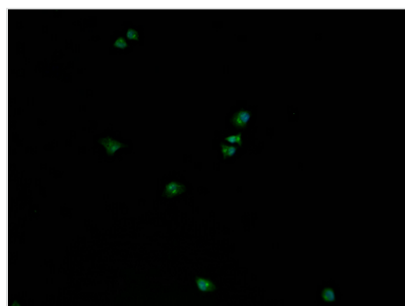
IHC image of CSB-MA000071M2m diluted at 1:500 and staining in paraffin-embedded human colon cancer performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit polymer IgG labeled by HRP and visualized using 0.05% DAB.



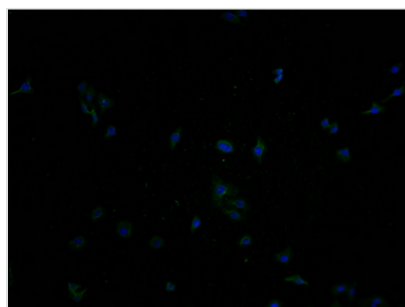
IHC image of CSB-MA000071M2m diluted at 1:500 and staining in paraffin-embedded human breast cancer performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit polymer IgG labeled by HRP and visualized using 0.05% DAB.



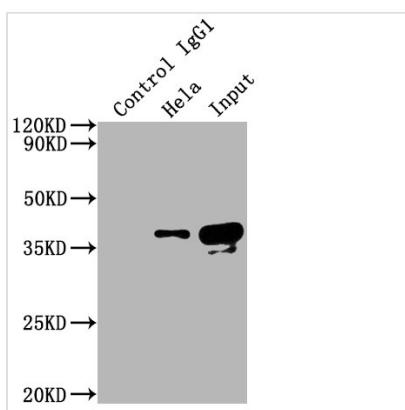
IHC image of CSB-MA000071M2m diluted at 1:500 and staining in paraffin-embedded human kidney tissue performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit polymer IgG labeled by HRP and visualized using 0.05% DAB.



Immunofluorescence staining of HeLa cells with (CSB-MA000071M2m) at 1:50, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeabilized using 0.2% Triton X-100 and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. Nuclear DNA was labeled in blue with DAPI. The secondary antibody was FITC-conjugated AffiniPure Goat Anti-Mouse IgG (H+L).



Immunofluorescence staining of HepG2 cells with (CSB-MA000071M2m) at 1:50, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeabilized using 0.2% Triton X-100 and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. Nuclear DNA was labeled in blue with DAPI. The secondary antibody was FITC-conjugated AffiniPure Goat Anti-Mouse IgG (H+L).



Immunoprecipitating GAPDH in HeLa whole cell lysate  
 Lane 1: Mouse control IgG instead of CSB-MA000071M2m in HeLa whole cell lysate.  
 Lane 2: CSB-MA000071M2m (5µl) + HeLa whole cell lysate (500µg)  
 Lane 3: HeLa whole cell lysate (10µg)  
 For western blotting, the blot was detected with CSB-MA000071M2m at 1:5000, and a HRP-conjugated Protein G antibody was used as the secondary antibody at 1:2000