Anti-Phospho-HMGCR (Ser872) Polyclonal Antibody

Product Details

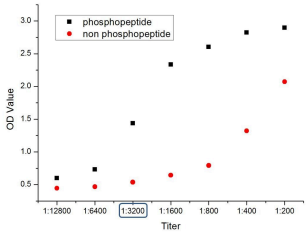
Ig Type:	IgG
Reactivity:	Human,Mouse,Rat,Rabbit (predicted:Chicken,Dog,Pig,Cow)
Molecular Weight:	Theoretical: 97 kDa. Actual: 97 kDa.
Purification:	Protein A purified

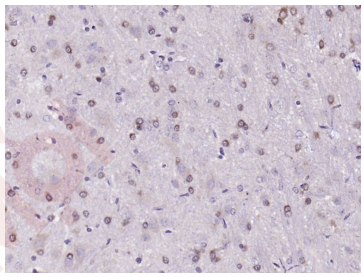
Applications

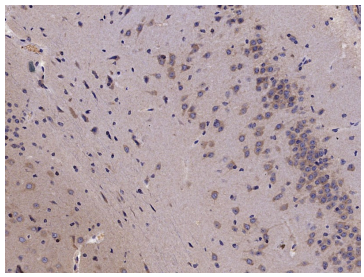
Verified Activity:

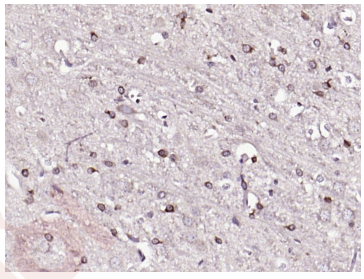
1. phosphopeptide
non phosphopeptide
2. Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 min; Blocking buffer (normal goat serum) at 37°C for 30 min; Antibody incubation with (phospho-HMGCR (Ser872)) Polyclonal Antibody, Unconjugated (TMAB-01421) at 1:200 overnight at 4°C, followed by operating according to SP Kit (Rabbit) instructionsand DAB staining.
3. Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by microwave in sodium citrate buffer (pH6.0); Block endogenous peroxidase by 3% hydrogen peroxide for 30 minutes; Blocking buffer (3% BSA) at RT for 30 min; Antibody incubation with (phospho-HMGCR (Ser872)) Polyclonal Antibody, Unconjugated (TMAB-01421) at 1:400 overnight at 4°C, followed by conjugation to the secondary antibody (labeled with HRP) and DAB staining.
4. Paraformaldehyde-fixed, paraffin embedded (mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 min; Blocking buffer (normal goat serum) at 37°C for 30 min; Antibody incubation with (phospho-HMGCR (Ser872)) Polyclonal Antibody, Unconjugated (TMAB-01421) at 1:200 overnight at 4°C, followed by operating according to SP Kit (Rabbit) instructionsand DAB staining.
5. Sample:
MCF-7 (Human) Cell Lysate at 30 µg
Primary: Anti-phospho-HMGCR (Ser872) (TMAB-01421) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 97 kDa
Observed band size: 97 kDa
6. Blank control: A431. Primary Antibody (green line): Rabbit Anti-HMGCR antibody (TMAB-01421)
Dilution: 1 µg/10^6 cells;
Isotype Control Antibody (orange line): Rabbit IgG.
Secondary Antibody: Goat anti-rabbit IgG-AF647
Dilution: 1 µg/test.
Protocol
The cells were fixed with 4% PFA (10 min at room temperature) and then permeabilized with 0.1% PBST for 20 min at room temperature. The cells were then incubated in 5% BSA to block non-specific protein-protein interactions for 30 min at room temperature. Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature.
7. Blank control (Black line): A431 (Black).

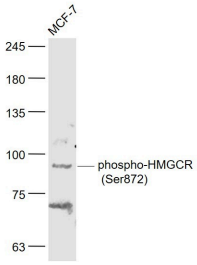
Primary Antibody (green line): Rabbit Anti-HMGCR antibody (TMAB-01421)
Dilution: 1 μg/10^6 cells;
Isotype Control Antibody (orange line): Rabbit IgG.
Secondary Antibody (white blue line): Goat anti-rabbit IgG-AF647
Dilution: 1 μg/test.
Protocol
The cells were fixed with 4% PFA (10 min at room temperature) and then permeabilized with 0.1% PBST for 20 min at room temperature. The cells were then incubated in 5% BSA to block non-specific protein-protein interactions for 30 min at room temperature. Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature.
8. Sample:
Cerebrum (Mouse) Lysate at 40 μg
Primary: Anti-phospho-HMGCR (Ser872) (TMAB-01421) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 97 kDa
Observed band size: 97 kDa

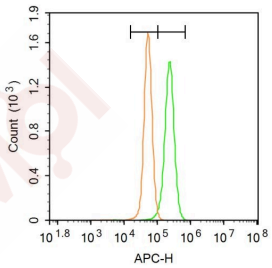


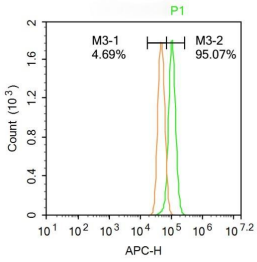


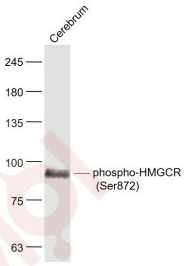












Application:	ELISA,FCM,IF,IHC-Fr,IHC-P,WB
Recommended	WB: 1:500-2000; IHC-P: 1:100-500; IHC-Fr: 1:100-500; IF: 1:100-500; FCM: 1ug/Test; ELISA: 1:5000-10000

Properties

Stability & Storage:	Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	KLH conjugated Synthesised phosphopeptide: human HMGCR around the phosphorylation site of Ser872
Antigen Species:	Human
Gene ID:	3156
Uniprot ID:	P04035
Synonyms:	HMGCR (p-Ser872);HMG-CoA reductase;3-hydroxy-3-methylglutaryl-coenzyme A reductase;p-HMGCR (S872);HMGCR;p-HMGCR (Ser872);HMGCR (p-S872)
Biology Area:	Metabolism of lipids and lipoproteins,Lipoprotein metabolism,Cholesterol Metabolism, Cholesterol Metabolism,Lipid metabolism,Lipoprotein metabolism,Heart disease,Lipid

metabolism

Research Background

HMG-CoA reductase is the rate-limiting enzyme for cholesterol synthesis and is regulated via a negative feedback mechanism mediated by sterols and non-sterol metabolites derived from mevalonate, the product of the reaction catalyzed by reductase. Normally in mammalian cells this enzyme is suppressed by cholesterol derived from the internalization and degradation of low density lipoprotein (LDL) via the LDL receptor. Competitive inhibitors of the reductase induce the expression of LDL receptors in the liver, which in turn increases the catabolism of plasma LDL and lowers the plasma concentration of cholesterol, an important determinant of atherosclerosis. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq].