Data Sheet (Cat.No.TMAY-01558)

TargetMol

Anti-Phospho-CREB (Ser133) Antibody (1Q730)

Product Details

Ig Type:	Rabbit IgG
Reactivity:	Human; Predicted to React with:Phospho-CREB (Ser133), may cross with Phospho-ATF-1 (Ser63) by sequence similarity. Predicted to React with: Species predicted to react based on 100% sequence homology: Mouse, Rat, Cynomolgus, Bovine, Pig, Goat
Conjugation:	Unconjugated
Clone:	1Q730
Purification:	Protein A

Applications

Verified Activity:	1. Western blot analysis of extracts from serum-starved Hela, untreated (-) or treated with TPA (200 nM, 15 min; +), using Phospho-CREB (Ser133) rabbit monoclonal Antibody at 1:200000 dilution (upper) or Anti-CREB Antibody, Rabbit Polyclonal at 1:500 dilution (middle) or Beta-Tubulin Loading Control Antibody, Rabbit MAb (Chimeric) at 1:40000 dilution (lower). Phospho-CREB (Ser133) rabbit monoclonal Antibody may cross with Phospho-ATF-1 (Ser63) by sequence similarity. 2. Immunohistochemical analysis of paraffin-embedded human breast cancer, untreated (left) or lambda phosphatase-treated (right), using Phospho-CREB (Ser133) Antibody, Rabbit Monoclonal at 1:200 dilution. 3. Immunohistochemical analysis of paraffin-embedded human lung cancer, untreated (left) or lambda phosphatase-treated (right), using Phospho-CREB (Ser133) Antibody, Rabbit Monoclonal at 1:200 dilution. 4. Immunohistochemical analysis of paraffin-embedded human renal carcinoma, untreated (left) or lambda phosphatase-treated (right), using Phospho-CREB (Ser133) Antibody, Rabbit Monoclonal at 1:200 dilution. 5. Western blot analysis of extracts from serum-starved Hela, untreated (line A); treated with TPA (100 nM, 15 min) (line B); treated with TPA and λ-phosphatase (line C) using Phospho-CREB (Ser133) rabbit monoclonal Antibody at 1:200000 dilution. (Validation Experiment) 6. Western blot analysis of extracts from serum-starved Hela, untreated (line A); treated with TPA (100 nM, 15 min), without peptide (line B) or antigen-specific phosphopeptide (line C) or antigen-specific peptide (line D) using Phospho-CREB (Ser133) rabbit monoclonal Antibody at 1:200000 dilution. (Validation Experiment) 7. Western blot analysis of extracts from serum-starved Hela treated with TPA (100 nM, 15 min), using Phospho-CREB (Ser133) rabbit monoclonal Antibody at 1:10000, 1:100000, 1:500000 dilution. (Validation Experiment)

Application:	IHC-P,WB
Recommended	WB: 1:10000-1:200000; IHC-P: 1:100-1:500

Properties

Stability & Storage:	Store at 2°C-8°C for 1 month. Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles. Preservative-Free.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	A synthetic peptide: residues around Ser133 of human CREB.
Antigen Species:	Human
Synonyms:	CREB1;CREB-1;p-CREB (Ser133);CREB (p-Ser133);p-CREB (S133);CREB (p-S133);Phospho-CREB (S133)

Research Background

CAMP responsive element binding protein 1, also known as CREB-1, plays multiple functions as a transcription factor in gene regulation. This protein is a CREB transcription factor that is a member of the leucine zipper family of DNA-binding proteins. CREB1 proteins are also known to be expressed in several spliced isoforms that act as transcriptional activators or repressors. The activator isoforms, possessing the functional domains for kinase induction and for interaction with other transcriptional regulators, act as transcriptional activators.The protein is phosphorylated by several protein kinases, and induces transcription of genes in response to hormonal stimulation of the cAMP pathway. CREB-1 has a complex influence on behavioural responses to drugs of abuse which varies depending on the brain region in which it is expressed. CREB-1 is important for serotonin (5-HT)-induced long-term facilitation (LTF) of the sensorimotor synapse in Aplysia.