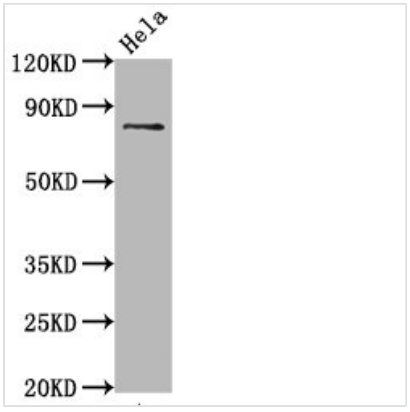
Phospho-MAPT (S396) Recombinant Monoclonal Antibody

Product Code	CSB-RA013481A396phHU
Abbreviation	Microtubule-associated protein tau
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P10636
Immunogen	A synthesized peptide derived from Human Phospho-MAPT (S396)
Species Reactivity	Human
Tested Applications	ELISA, WB; Recommended dilution: WB:1:500-1:5000
Relevance	Promotes microtubule assembly and stability, and might be involved in the establishment and maintenance of neuronal polarity. The C-terminus binds axonal microtubules while the N-terminus binds neural plasma membrane components, suggesting that tau functions as a linker protein between both. Axonal polarity is predetermined by TAU/MAPT localization (in the neuronal cell) in the domain of the cell body defined by the centrosome. The short isoforms allow plasticity of the cytoskeleton whereas the longer isoforms may preferentially play a role in its stabilization.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Alias	Microtubule-associated protein tau, Neurofibrillary tangle protein, Paired helical filament-tau, PHF-tau, MAPT, MAPTL, MTBT1, TAU
Immunogen Species	Homo sapiens (Human)
Research Area	Neuroscience
Gene Names	MAPT
Clone No.	1G3
Image	



Western Blot
Positive WB detected in Hela whole cell lysate
All lanes Phospho-MAPT antibody at 0.67µg/ml
Secondary
Goat polyclonal to rabbit IgG at 1/50000 dilution
Predicted band size: 80 KDa
Observed band size: 80 KDa

Description

In the quest to develop the phospho-MAPT (S396) recombinant monoclonal antibody, the initial phase involves the extraction of genes encoding this antibody from rabbits that have been previously exposed to a synthesized peptide derived from the human MAPT protein phosphorylated at S396. These antibody genes are then seamlessly integrated into specialized expression vectors. Following this genetic modification, the vectors are carefully introduced into host suspension cells, which are diligently cultured to stimulate the expression and secretion of antibodies. Subsequently, the phospho-MAPT (S396) recombinant monoclonal antibody is subjected to a meticulous purification process utilizing affinity chromatography, effectively isolating the antibody from the surrounding cell culture supernatant. Finally, the antibody's functionality is comprehensively evaluated through ELISA and WB tests, unequivocally confirming its capacity to interact effectively with the human MAPT protein phosphorylated at S396.