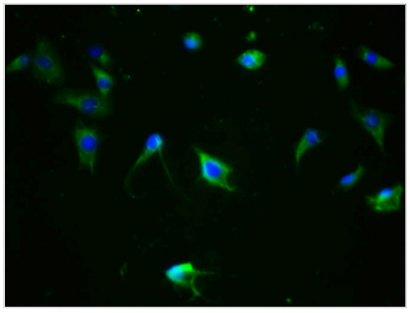
Phospho-MAPT (S324) Recombinant Monoclonal Antibody

Product Code	CSB-RA013481A324phHU
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 (S324)
Species Reactivity	Human
Tested Applications	ELISA, IF; Recommended dilution: IF:1:20-1:200
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.	4E8
Image	



Immunofluorescence staining of SH-SY5Y cells with CSB-RA013481A324phHU at 1:100,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?. The secondary antibody was Alexa Fluor 488-congugated AffiniPure Goat Anti-Rabbit IgG (H+L).

Description

To produce the phospho-MAPT (S324) recombinant monoclonal antibody, the initial step involves isolating the genes responsible for coding the MAPT antibody from rabbits that have been immunized with a synthesized peptide derived from the human MAPT protein phosphorylated at S324. These antibody genes are then cloned into specialized expression vectors. Following this genetic modification, the vectors are introduced into host suspension cells. Subsequently, positive cells are cultured to facilitate the expression and secretion of antibodies. The phospho-MAPT (S324) recombinant monoclonal antibody is purified from the cell culture supernatant using affinity chromatography. Finally, the antibody's functionality is rigorously tested through ELISA and IF assays, confirming its ability to react with human MAPT protein phosphorylated at S324.