

## MTOR

### Rabbit Anti-Human Mechanistic Target of Rapamycin Clone Poly6199 pAb

<b>Catalog No.</b>	CSI14400 CSI14401	<b>Quantity:</b>	50 µl 200 µl
<b>Alternate Names:</b>	Mammalian target of rapamycin, FK506 binding protein 12-rapamycin associated protein 1 (FRAP1)		
<b>Description:</b>	mTOR (mammalian target of rapamycin, FK506 binding protein 12-rapamycin associated protein 1 (FRAP1)) is a 289 kD member of the PI3 kinase family, containing, HEAT, FRB, FATC domains. mTOR is expressed in the nucleus and cytoplasm and is a target for cell-cycle arrest and the immunosuppressive effects of FKBP12-rapamycin complex. mTOR controls ribosome biogenesis, cell growth, and acts as an ATP sensor. mTOR is repressed by nutrient deprivation and mitochondrial uncoupling. Association of raptor negatively regulates mTOR kinase activity, also inhibited by tuberin-hamartin tumor suppressor complex. mTOR is modified by phosphorylation and associates with FKBP12, rapamycin, p70 S6 kinase, 4E-BP1, raptor, CLIP-170, tuberin, and hamartin. The Poly6199 antibody recognizes human mTOR and has been shown to be useful for Western blotting.		
<b>Structure:</b>	PI3 kinase family, PI3/4 kinase, HEAT, FRB, FATC domains; 289 kD.		
<b>Gene ID:</b>	2475		
<b>Distribution:</b>	Nuclear, some cytoplasmic		
<b>Function:</b>	Target for cell-cycle arrest, immunosuppressive effects of FKBP12-rapamycin complex, controls ribosome biogenesis, cell growth, ATP sensor.		
<b>Host:</b>	Rabbit		
<b>Immunogen:</b>	Peptide corresponding to amino acids 2-18 of human mTOR		
<b>Isotype:</b>	IgG		
<b>Clone:</b>	Poly6199		
<b>Regulation:</b>	Repressed by nutrient deprivation and mitochondrial uncoupling. Association of raptor negatively regulates kinase activity, inhibited by tuberin-hamartin tumor suppressor complex.		
<b>Formulation:</b>	This antibody is provided in phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 50% glycerol. <b>Precaution:</b> Sodium azide is a poisonous and hazardous substance which should be handled by trained staff only.		
<b>Purification:</b>	The antibody was purified by antigen-affinity chromatography.		



**Modification:** Phosphorylation

**Reactivity:** Human

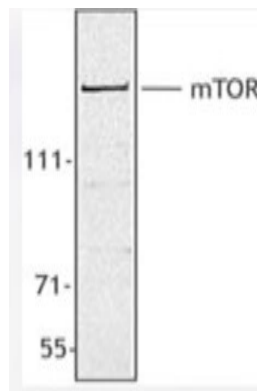
**Applications:** Western Blot

**Recommended Usage:** Each lot of this antibody is quality control tested by Western blotting. Western blotting, suggested working dilution(s): Use 10-20  $\mu$ l per 5 ml antibody dilution buffer for each mini-gel. It is recommended that the reagent be titrated for optimal performance for each application.

**Storage & Stability:** Upon receipt, store frozen at -20° C.

**Interaction:** FKBP12, rapamycin, p70 S6 kinase, 4E-BP1, raptor, CLIP-170, tuberlin, hamartin

SK-N-MC cell extract was resolved by electrophoresis, transferred to nitrocellulose and probed with rabbit anti-mTOR antibody. Proteins were visualized using a donkey anti-rabbit secondary conjugated to HRP and a chemiluminescence detection system.



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