



## Certificate of Analysis

### Recombinant Human mTOR Expressed in Human Cells

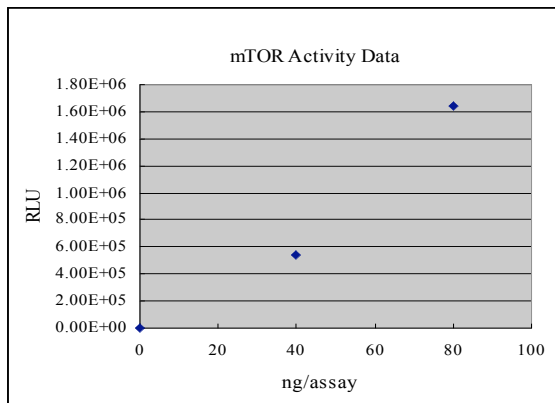
mTOR<sup>HumaXpress</sup>  
Cat #: HZ-2051 Lot # CHI-1007

**Product Description:** Recombinant human Truncated GST-tagged mTOR (Accession No: L344075) expressed in engineered human cells.

**Specific Activity:** 93U/mg, where one unit of kinase activity is equivalent to 1nmole of ATP consumed in the presence of 0.1 $\mu$ g/ $\mu$ l P70S6K1 per minute at 30 $^{\circ}$ C with a final ATP concentration of 100 $\mu$ M.

#### Quality Control Testing

**mTOR Kinase activity Assay:** mTOR was assayed using 0.1 $\mu$ g/ $\mu$ l P70S6K1 after stimulation. The mTOR protein was incubated with the substrate at 30 $^{\circ}$ C for 10 minutes. Activity was measured and the luminescent signal was converted to the ATP consumed in the reaction.



**Formulation:** 0.5 $\mu$ g of recombinant protein in 50 $\mu$ l of 50mM Tris, pH7.4, 150mM NaCl, 5mM DTT, 1mM PMSF. Frozen solution.

**Storage and Stability:** Stable for 6 months at -80 $^{\circ}$ C from date of shipment (Avoid repeated freezing and thawing). For maximum recovery of product, centrifuge original vial prior to removing the cap.

**Purity Confirmation:** Purity was assessed by SDS-PAGE and SimplyBlue SafeStaining using 100ng of mTOR Kinase protein. Arrow indicates the GST-fused mTOR.

#### Reference

Nobukuni T, et al (2005), *Proc Natl Acad Sci.*, 102, 14238-14243.

Sabatini DM. (2006), *Nat Rev Cancer*, 9, 729-734.

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