



# Recombinant Protein Technical Manual

## Recombinant Mouse CDC37/CDC37A Protein

RPES1546

### Product Data:

**Product SKU:** RPES1546

**Size:** 20µg

**Species:** Mouse

**Expression host:** Baculovirus-Insect Cells

**Uniprot:** Q61081

### Protein Information:

**Molecular Mass:** 44.7 kDa

**AP Molecular Mass:** 46 kDa

**Tag:**

**Bio-activity:**

**Purity:** > 85 % as determined by SDS-PAGE

**Endotoxin:** < 1.0 EU per µg of the protein as determined by the LAL method.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from sterile 20mM Tris, 500mM NaCl, 10% glycerol, pH 7.4

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** p50;p50Cdc37

## Immunogen Information:

**Sequence:** Met1-Ala379

## Background:

CDC37 is a protein that is expressed in proliferative zones during embryonic development and in adult tissues, consistent with a positive role in proliferation and is required for cell division in budding yeast. CDC37 is thought to play an important role in the establishment of signaling pathways controlling cell proliferation through targeting intrinsically unstable oncoprotein kinases such as Cdk-4, Raf, and src to the molecular chaperone Hsp90. Decreased Hsp90 expression can reduce the levels of microtubule-associated protein tau, whose overexpression may induce many diseases. CDC37 is considered as a co-chaperone that is classified to Hsp90's accessory proteins. It has been reported that suppression of Cdc37 destabilized tau, leading to its clearance, whereas cdc37 overexpression preserved tau. Cdc37 was found to co-localize with tau in neuronal cells and to physically interact with tau from human brain. Moreover, Cdc37 levels significantly increased with age.