Mouse CDC37 / CDC37A Protein

Catalog Number: **50826-MNCB**

General Information

Gene Name Synonym:

p50; p50Cdc37

Protein Construction:

A DNA sequence encoding the mouse CDC37 (Q61081) (Met1-Ala379) was expressed with two additional amino acids (Gly & Pro) at the N-terminus.

Source: Mouse

Expression Host: Baculovirus-Insect Cells

QC Testing

Purity: > 85 % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per μg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Gly

Molecular Mass:

The recombinant mouse CDC37 consists of 381 amino acids and predicts a molecular mass of 44.7 KDa. It migrates as an approximately 46 KDa band in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile 20mM Tris, 500mM NaCl, 10% glycerol, pH 7.4.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

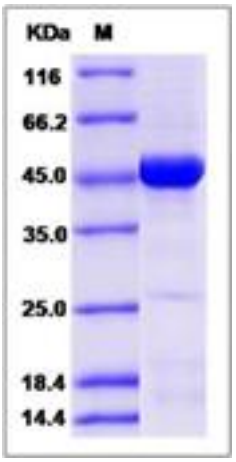
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

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 though 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-1, 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.

References

1.Dai K, *et al.* (1996) P hysical Interaction of Mammalian CDC37 with CDK4. The journal of biological chemistry. 271: 22030-4. 2.Pearl LH, *et al.* (2005) Hsp90 and Cdc37-a chaperone cancer conspiracy. Current opinion in genetics development. 15 (1): 55-61. 3.Chen GQ, *et al.* (2002) TNF-Induced Recruitment and Activation of the IKK Complex Require Cdc37 and Hsp90. Molecular cell. 9 (2): 401-10.