Mouse WIF1 / WIF-1 Protein (His Tag)

Catalog Number: **50984-M08H**

General Information

Gene Name Synonym:

AW107799; WIF-1

Protein Construction:

A DNA sequence encoding the mouse WIF1 (Q9WUA1) (Met1-Trp379) was expressed with a C-terminal polyhistidine tag.

Source: Mouse

Expression Host: HEK293 Cells

QC Testing

Purity: > 93 % 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 29

Molecular Mass:

The recombinant mouse WIF1 comprises 362 amino acids and has a predicted molecular mass of 39.8 kDa. The apparent molecular mass of the protein is approximately 44 kDa in SDS-PAGE under reducing conditions due to glycosylation.

Formulation:

Lyophilized from sterile PBS, 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:

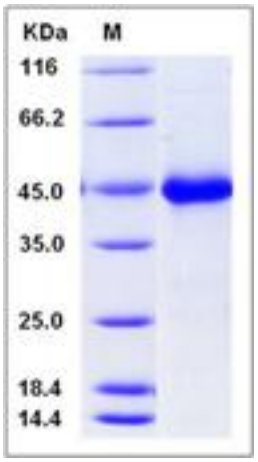
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

WIF1, also known as WIF-1 and wnt inhibitory factor 1, is a secreted protein which binds WNT proteins and inhibits their activities. It contains a WNT inhibitory factor (WIF) domain and 5 epidermal growth factor (EGF)-like domains. WNT proteins are extracellular signaling molecules involved in the control of embryonic development. WIF1 may be involved in mesoderm segmentation and can be detected in fish, amphibia and mammals. WIF-1 is a recurrent target in human salivary gland oncogenesis. Downregulation of WIF1 takes part in the development and progression of pleomorphic adenomas. WIF1 also is a tumor suppressor, and has been found to be epigenetically silenced in various cancers, specifically in nonfunctioning pituitary tumors. WIF1 are expected to have molecular function (protein tyrosine kinase activity) and to localize in various compartments (extracellular space, extracellular region).

References

1.Shepelev MV, *et al*. (2006) WIF1: perspectives of application in oncology. Mol Gen Mikrobiol Virusol. (4): 3-7. 2.Lin YC, *et al*. (2006) Wnt signaling activation and WIF-1 silencing in nasopharyngeal cancer cell lines. Biochem Biophys Res Commun. 341(2):635-40. 3.Queimado L, *et al*. (2007) WIF1, an inhibitor of the Wnt pathway, is rearranged in salivary gland tumors. Genes Chromosomes Cancer. 46(3):215-25.