

Human Periostin / POSTN Protein (His Tag)

Catalog Number: 10299-H08H



Sino Biological Inc.

Biological Solution Specialist

General Information

Gene Name Synonym:

OSF-2; OSF2; PDLPOSTN; periostin; PN; A630052E07Rik; AI747096; OSF-2; Osf2; peri; PLF; PN

Protein Construction:

A DNA sequence encoding the human POSTN isoform 3 (NP_001129407.1) corresponding to amino acid (Met 1-Gln 781) was expressed with a C-terminal polyhistidine tag.

Source: Human

Expression Host: Human Cells

QC Testing

Purity: > 97 % as determined by SDS-PAGE

Bio Activity:

Measured by its ability to induce adhesion of ATDC5 mouse chondrogenic cells. When cells are added to POSTN-His coated plates (10µg/mL, 100µL/well), approximately >60% will adhere specifically after 30 minutes at 37°C.

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 °C

Predicted N terminal: Asn 22

Molecular Mass:

The recombinant human POSTN consists of 771 amino acids and has a predicted molecular mass of 86 kDa. In SDS-PAGE under reducing conditions, it migrates with an apparent molecular mass of 80 kDa 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:

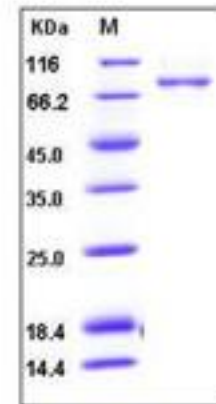
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Periostin (POSTN), also known as OSF2 (osteoblast specific factor 2), is a heterofunctional secreted extracellular matrix (ECM) protein comprised of four fasciclin domains that promotes cellular adhesion and movement, as well as collagen fibrillogenesis. Postn is expressed in unique growth centers during embryonic development where it facilitates epithelial-mesenchymal transition (EMT) of select cell populations undergoing reorganization. In the adult, Postn expression is specifically induced in areas of tissue injury or areas with ongoing cellular re-organization. In the adult heart Postn is induced in the ventricles following myocardial infarction, pressure overload stimulation, or generalized cardiomyopathy. Although the detailed function of Postn is still unclear, Postn-integrin interaction is thought to be involved in tumor development. Postn is frequently overexpressed in various types of human cancers, stimulating metastatic growth by promoting cancer cell survival, invasion and angiogenesis, and can be a useful marker to predict the behavior of cancer.

References

- 1.Kudo, Y. et al., 2007, Histol Histopathol. 22 (10):1167-1174.
- 2.Li, J.S. et al., 2007, World J Gastroenterol. 13 (39): 5261-5266.
- 3.Oku, E. et al., 2008, Int J Hematol. 88 (1): 57-63.

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