

Recombinant Human POSTN, His-tagged

Cat. No. POSTN-43H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	The Human periostin, osteoblast specific factor His-Tagged Fusion Protein is produced in <i>E. coli</i> , and its molecular weight is 75 kDa protein containing 648 amino acid residues of the human OSF-2 and 23 additional amino acid residues - HisTag, Xa - cleavage site (underlined).
Species	Human
Source	E.coli
Description	Periostin is a disulfide linked 90 kDa, 811 amino acid protein originally isolated as a osteoblast-specific factor that functions as a cell adhesion molecule for preosteoblasts and is thought to be involved in osteoblast recruitment, attachment and spreading. Additionally, periostin expression has previously been shown to be significantly increased by both transforming growth factor beta-1(TGFbeta1) and bone morphogenetic protein (BMP-2). OSF-2 has a typical signal sequence, followed by a cysteine-rich domain, a fourfold repeated domain and a C-terminal domain. The fourfold repeated domain of OSF-2 shows homology with the insect protein fasciclin. Periostin mRNA is expressed in the developing mouse embryonic and fetal heart, and that it is localized to the endocardial cushions that ultimately divide the primitive heart tube into a four-chambered heart.
Specificity	The amino acid sequence of the Periostin human recombinant is 100% homologous to the part of sequence 22-669 aa of the OSF-2 human without signal sequence.

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Purification Method	Three-step procedure using affinity Ni-NTA chromatography and size exclusion chromatography before and after refolding.
Purity	>90% (SDS-PAGE analyzed).
Formulation	Sterile filtered and lyophilized from 0.5 mg/ml in 0.05M Acetate buffer pH-4.
Reconstitution	Add 0.2 ml of 0.1M Acetate buffer pH4 and let the lyophilized pellet dissolve completely. For conversion into higher pH value, we recommend intensive dilution by relevant buffer to a concentration of 10µg/ml. In higher concentrations the solubility of this antigen is limited.
Storage	Store lyophilized protein at -20°C. Aliquot the product after reconstitution to avoid repeated freezing/thawing cycles. Reconstituted protein can be stored at 4°C for a limited period of time; it does not show any change after two weeks at 4°C.
Stability/Shelf Life	The lyophilized protein remains stable until the expiry date when stored at -20°C.
Applications	Western blotting, ELISA

GENE INFORMATION

Gene Name	POSTN periostin, osteoblast specific factor [Homo sapiens]
Synonyms	POSTN; periostin, osteoblast specific factor; PN; OSF2; OSF-2; PDLPOSTN; MGC119510; MGC119511; periostin; RP11-412K4.1; periostin isoform thy2; periostin isoform thy4; periostin isoform thy6; periostin isoform thy8; periodontal ligament-specific periostin; osteoblast specific factor 2 (fasciclin I-like); Osteoblast-specific factor 2; OTTHUMP00000018268
Gene ID	10631

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mRNA Refseq	NM_001135934
Protein Refseq	NP_001129406
MIM	608777
UniProt ID	Q15063
Function	heparin binding; protein binding

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