

Periostin, His Tag, human recombinant (rHuPeriostin-His)

Catalog No: 94985 Lot No: XXXXX Source: *E. coli*

Synonyms: OSF-2, Periostin, Osteoblast Specific Factor 2, PN OSF-2, PDLPOSTN, POSTN, MGC119510, MGC119511,

PN, RP11-412K4.1

Background

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.

Description

OSF2 His tagged fusion protein human recombinant produced in *E. coli* is a 75 kDa protein containing 648 amino acid residues of human OSF-2 and 23 additional amino acid residues His Tag, Xa - cleavage site.

Formulation

Filtered (0.4 µm) and lyophilized from 0.5 mg/ml in 0.05 M acetate buffer pH 4.

Solubility

It is recommended to add 0.1 M acetate buffer pH4 to prepare a working stock solution of approximately 0.5 mg/ml 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 concentration the solubility of this antigen is limited. Product is not sterile! Please filter the product by an appropriate sterile filter before using in the cell culture.

Stability

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.

Purity

Greater than 90% as determined by SDS-PAGE.

Amino Acid Sequence

| МGННННННН | ${\tt HHSSGHIEGR}$ | HMRNNHYDKI | LAHSRIRGRD | QGPNVCALQQ | ILGTKKKYFS | TCKNWYKKSI | CGQKTTVLYE | |
|------------|--------------------|------------|--------------------|--------------------|--------------------|--------------------|------------|--|
| CCPGYMRMEG | MKGCPAVLPI | DHVYGTLGIV | GATTTQRYSD | ASKLREEIEG | KGSFTYFAPS | NEAWDNLDSD | IRRGLESNVN | |
| VELLNALHSH | ${\tt MINKRMLTKD}$ | LKNGMIIPSM | YNNLGLFINH | YPNGVVTVNC | ARIIHGNQIA | TNGVVHVIDR | VLTQIGTSIQ | |
| DFIEAEDDLS | ${\tt SFRAAAITSD}$ | ILEALGRDGH | ${\tt FTLFAPTNEA}$ | FEKLPRGVLE | ${\tt RFMGDKVASE}$ | ${\tt ALMKYHILNT}$ | LQCSESIMGG | |
| AVFETLEGNT | IEIGCDGDSI | TVNGIKMVNK | KDIVTNNGVI | ${\tt HLIDQVLIPD}$ | SAKQVIELAG | ${\tt KQQTTFTDLV}$ | AQLGLASALR | |
| PDGEYTLLAP | ${\tt VNNAFSDDTL}$ | SMVQRLLKLI | LQNHILKVKV | GLNELYNGQI | LETIGGKQLR | VFVYRTAVCI | ENSCMEKGSK | |
| QGRNGAIHIF | REIIKPAEKS | LHEKLKQDKR | FSTFLSLLEA | ${\tt ADLKELLTQP}$ | ${\tt GDWTLFVPTN}$ | DAFKGMTSEE | KEILIRDKNA | |
| LQNIILYHLT | PGVFIGKGFE | PGVTNILKTT | QGSKIFLKEV | ${\tt NDTLLVNELK}$ | SKESDIMTTN | ${\tt GVIHVVDKLL}$ | YPADTPVGND | |
| QLLEILNKLI | KYIQIKFVRG | STFKEIPVTV | Y | | | | | |





Applications

WB*ELISA

Usage

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