



## RayBiotech, Inc.

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### Certificate of Analysis and Data Sheet

## Recombinant Human Periostin

**Catalog No.**  
228-11225

**Source:**  
E.Coli

### Synonyms

OSF-2, Periostin, Osteoblast Specific Factor 2, PN OSF-2, PDLPOSTN, POSTN, MGC119510, MGC119511, PN, RP11-412K4.1.

### Introduction

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 four-old repeated domain and a C-terminal domain. The four-old 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

The Human OSF-2 His-Tagged Fusion Protein is produced in E. coli, 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.

### Purity

Greater than 90% as determined by SDS-PAGE.

**The products are furnished for LABORATORY RESEARCH USE ONLY.  
Not for diagnostic or therapeutic use.**



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### **Formulation**

Filtered (0.4  $\mu$ m) and lyophilized from 0.5 mg/ml in 0.05M Acetate buffer pH-4.

### **Solubility**

It is recommended to add 0.1M Acetate buffer pH-4 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 10 $\mu$ g/ml. In higher concentrations the solubility of this antigen is limited. Product is not sterile! Please filter the product by an appropriate sterile filter before using it 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.

The lyophilized protein remains stable until the expiry date when stored at -20°C.

### **Amino Acid Sequence**

MGHHHHHHHH HHSSGHIEGR HMRNNHYDKI LAHSRIRGRD QGPNVCALQQ ILGTKKKYFS  
TCKNWYKCSI CGQKTTVLYE CCPGYMRMEG MKGCPAVLPI DHVYGTGLGIV GATTTQRYSD  
ASKLREEIEG KGSFTYFAPS NEAWDNLDSD IRRGLESNVN VELLNALHSH MINKRMLTKD  
LKNGMIPSM YNNLGLFINH YPNGVVTVNC ARIIHGNQIA TNGVVHVIDR VLTQIGTSIQ  
DFIEAEDDLS SFRAAAITSD ILEALGRDGH FTLFAPTNEA FEKLPRGVLE  
RFMGDKVASEALMKYHILNT LQCSESIMGG AVFETLEGNT IEIGCDGDSI TVNGIKMVNK  
KDIVTNNGVI HLIDQVLIPD SAKQVIELAG KQQTTFIDL AQLGLASALR PDGEYTLAP  
VNNAFSDDTL SMVQRLLKLI LQNHILKVKV GLNELYNGQI LETIGGKQLR VFVYRTAVCI  
ENSCMEKGSK QGRNGAIHIF REIKPAEKS LHEKLKQDKR FSTFLSLLEA ADLKELLTQP  
GDWTLFVPTN DAFKGMTSEE KEILIRDKNA LQNIILYHLT PGVFIGKGFE PGVTNLIKTT  
QGSKIFLKEV NDTLLVNELK SKESDIMTTN GVIHVVDKLL YPADTPVGND QLEILNKLI  
KYIQIKFVRG STFKEIPVTY Y.

### **Applications**

Western blot, ELISA

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