



## Osteoblast Specific Factor 2 Human, Sheep Polyclonal Antibody

### Product Data Sheet

**Source of Antigen:** *E.coli*

**Host:** Sheep

**Cat. No.:**

RD184045100 (0.1 mg)

**Other names:** Periostin, PN, OSF-2, POSTN, Fasciclin-I like

### Research topic

Bone and cartilage metabolism, Cardiovascular disease, Cytokines and chemokines and related molecules

### Preparation

The antibody was raised in sheep by immunization with the recombinant Human OSF-2.

### Amino Acid Sequence

The immunization antigen (75 kDa) is a protein containing 648 AA of recombinant Human OSF-2 and 23 AA, N-Terminal HisTag and Xa - cleavage site (highlighted). The antigen contains amino acid residues 22 to 669 of the human OSF-2 precursor. The antigen includes all four fasciclin domains of OSF-2.

MGHHHHHHHH HHSSGHIEGR HMRNNHYDKI LAHSRIRGRD QGPNVCALQQ ILGTTKKYFS TCKNWKYSI CGQKTTVLYE  
CCPGYMRMEG MKGCPAVLPD DHVYGTGLGIV GATTQRYSD ASKLREEIEG KGSFTYFAPS NEAWDNLDSD IRRGLESNVN  
VELLNALHSH MINKRMLTKD LKNGMIIPSM YNNLGLFINH YPNGVVTVNC ARIIHGNQIA TNGVVHVIDR VLTQIGTSIQ  
DFIEAEDDLS SFRAAAITSD ILEALGRDGH FTLFAPTNEA FEKLPRGVLE RFMGDKVASE ALMKYHILNT LQCSSESIMGG  
AVFETLEGNT IEIGCDGDSI TVNGIKMVNK KDIVTNGVI HLIDQVLIPD SAKQVIELAG KQQTTFDTLV AQLGLASALR  
PDGEYTLAP VNNAFSDDTL SMVQRLKLI LQNHILKVKV GLNELYNGQI LETIGGKQLR VFVYRTAVCI ENSCMEKGSK  
QGRNGAIHIF REIKPAEKS LHEKLKQDKR FSTFLSLLEA ADLKELLTQP GDWTLFVPTN DAFKGMTSEE KEILIRDKNA  
LQNIILYHLT PGVFIGKGF PGVTNLIKTT QGSKIFLKEV NDTLLVNELK SKESDIMTTN GVIHVVDKLL YPADTPVGND  
QLLEILNKLI KYIQIKFVRG STFKEIPVTY Y

### Species Reactivity

Human

Not yet tested in other species.

### Purification Method

Immunoaffinity chromatography on a column with immobilized recombinant Human OSF-2.

### Antibody Content

0.1 mg (determined by BCA method, BSA was used as a standard)

### Formulation

The antibody is lyophilized in 0.05 M phosphate buffer, 0.1 M NaCl, pH 7.2. **AZIDE FREE.**

### Reconstitution

Add 0.1 ml of deionized water and let the lyophilized pellet dissolve completely. Slight turbidity may occur after reconstitution, which does not affect activity of the antibody. In this case clarify the solution by centrifugation.

### Shipping

At ambient temperature. Upon receipt, store the product at the temperature recommended below.

### Storage/Stability

The lyophilized antibody remains stable and fully active until the expiry date when stored at -20°C. Aliquot the product after reconstitution to avoid repeated freezing/thawing cycles and store frozen at -80°C. Reconstituted antibody can be stored at 4°C for a limited period of time; it does not show decline in activity after one week at 4°C.

### Expiration

See vial label.

**Lot Number**

See vial label.

**Quality Control Test**

Indirect ELISA - to determine titer of the antibody

SDS PAGE - to determine purity of the antibody

**Applications**

Western blotting

**Introduction to the Molecule**

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.

**Note**

This product is for research use only.

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