



Osteoblast Specific Factor 2 Human, Rabbit Polyclonal Antibody

Product Data Sheet

Source of Antigen: *E.coli*

Host: Rabbit

Cat. No.:

RD181045050 (0.05 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 rabbits 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.

MGHHHHHHHHH HHS^{SGH}IEGR HMRNNHYDKI LAHSRIRGRD QGPNVCALQQ ILGTKKKYFS TCKNWKYSI CGQKTTVLYE
CCPGYMRMEG MKGCPAVLPI DHVYGTLGIV GATTQRYSD ASKLREEIEG KGSFTYFAPS NEAWDNLDS IRRGLESNVN
VELLNALHSH MINKRMLTKD LKNGMIIPSM YNNLGLFINH YPNGVTVNC ARIIHGNQIA TNGVVHVIDR VLTQIGTSIQ
DFIEAEDDLS SFRAAAITSD ILEALGRDGH FTLFAPTNEA FEKLPRGVLE RFMGDKVASE ALMKYHILNT LQCSESIMGG
AVFETLEGNT IEIGCDGDSI TVNGIKMVNK KDIVTNNGVI HLIDQVLIPD SAKQVIELAG KQQTTF^{TD}LV AQLGLASALR
PDGEYTLAP VNNAFSDDTL SMVQRLKLI LQNHILKVKV GLNELYNGQI LETIGGKQLR VFVYRTAVCI ENSCMEKGSK
QGRNGAIHIF REIIKPAEKS LHEK^{LK}QDKR FSTFLSLLEA ADLKELLTQP GDWTLFVPTN DAFKGMTSEE KEILIRDKNA
LQNIILYHLT PGVFIGKGF^E PGVTN^{LK}TT QGSKIFLKEV NDTLLVNELK SKESDIMTTN GVIHVVDKLL YPADTPVGND
QLLEILNKLI KYIQIKFVRG STFKEIPVTV Y

Species Reactivity

Human, Rat, Chicken, Mouse

Not yet tested in other species.

Purification Method

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

Antibody Content

0.05 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 0.05 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

Immunohistochemistry, Western blotting

Introduction to the Molecule

Periostin is a disulfide linked 90 kDa, 811 amino acid protein originally isolated as an 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.

References to this Product

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Note

This product is for research use only.

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