

DP2019**Polyclonal Antibody to Periostin - Azide Free****Alternate names:**

OSF-2, OSF2, Osteoblast-specific factor 2, PN, POSTN

Quantity:

50 µg

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.

Uniprot ID:[Q15063](#)**NCBI:**[NP_001129406](#)**GeneID:**[10631](#)**Host:**

Rabbit

Immunogen:

Recombinant Human OSF-2

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

MGHHHHHHHH HHSSGHTEGR HMRNNHYDKI LAHSRIRGRD QGPNVCALQQ ILGTKKKYFS
TCKNWKYKSI CGQKTTVLYE CCPGYMRMEG MKGCPAVLPI DHVYGTGLGIV GATTTQRYSD
ASKLREEIEG KGSFTYFAPS NEAWDNLDSD IRRGLESNVN VELLNALHSH MINKRMLTKD
LKNMGIIPSM YNNLGLFINH YPNGVVTVNC ARIIHGNQIA TNGVVHVIDR VLTQIGTSIQ
DFIEAEDDLS SFRAAAITSD ILEALGRDGH FTLFAPTNEA FEKLPRGVLE RFMGDKVASE
ALMKYHILNT LQCSESIMGG AVFETLEGNT IEIGCDGDSI TVNGIKMVNK KDIVTNNNGVI
HLIDQVLIPD SAKQVIELAG KQQTTFIDLV AQLGLASALR PDGEYTLAP VNNAFSDDTL
SMVQRLLKLI LQNHILKVKV GLNELYNGQI LETIGGKQLR VFVYRTAVCI ENSCMEKGSK
QGRNGAIHIF REIIKPAEKS LHEKCLKQDKR FSTFLSLLEA ADLKELLTQP GDWTLFVPTN
DAFKGMTSEE KEILIRDKNA LQNIILYHLT PGVFIGKGFPE PGVTNLIKTT QGSKIFLKEV
NDTLLVNELK SKESDIMTTN GVIHVVDKLL YPADTPVGND QLLEILNKLI KYIQIKFVRG
STFKEIPVTV Y

Remarks: The immunization antigen (75 kDa) is a protein containing 648 amino acids of recombinant Human OSF-2 and 23 amino acids, 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.

Format:**State:** Lyophilized (sterile filtered) purified IgG fraction**Purification:** Immunoaffinity Chromatography on Immobilized Recombinant Human OSF2**Buffer System:** 0.05 M Phosphate Buffer, 0.1 M NaCl, pH 7.2 without preservatives**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.

Applications:**ELISA.**

Western blot (0.1-1 µg/ml).

Immunohistochemistry on Frozen Sections.

Immunohistochemistry on Paraffin (1/100-1/5,000).

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity:

The antibody recognizes OSF-2.

Species Reactivity:

Tested: Human, Rat, Mouse, Chicken

Add. Information:**Antibody Content**

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

Quality Control Test

Indirect ELISA - to determine titer of the antibody

SDS PAGE - to determine purity of the antibody

Storage:

Store lyophilized at 2-8°C for 6 months or at -20°C long term.

After reconstitution store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C long term.

Avoid repeated freezing and thawing.

Shelf life: one year from despatch.

General Readings:

1. Castronovo V et al., Mol Cell Proteomics . Nov;5(11):2083-91.
2. Li P et al. J Appl Physiol . Jan;102(1):390-8 (2007).
3. Grigoriadis A et al. Breast Cancer Rest . Oct 2;8(5):R56 (2006).
4. Utispan K et al. Mol Cancer. 2010;9:13.
5. Blumer MJ et al. J. Anat . Jun;208(6):695-707 (2006).
6. Hosoya A et al. J Histochem Cytochem . Dec;54(12):1371-8 (2006).
7. Gao BB et al. Mol Cell Proteomics. 2008 Dec;7 (12):2399-409.
8. Soltermann A et al. Cancer. 2008 Apr 25;114 (2):124-33.