



# Recombinant Protein Technical Manual

## Recombinant Mouse Periostin/POSTN Protein (His Tag)(Active)

RPES2627

### Product Data:

**Product SKU:** RPES2627

**Size:** 50µg

**Species:** Mouse

**Expression host:** HEK293 Cells

**Uniprot:** NP\_056599.1

### Protein Information:

**Molecular Mass:** 89 kDa

**AP Molecular Mass:** 80-85 kDa

**Tag:** C-His

**Bio-activity:** Measured by its ability to induce adhesion of ATDC5 mouse chondrogenic cells. When cells are added to POSTN-His coated plates (10 µg/mL, 100 µL/well), approximately >40% will adhere specifically after 30 minutes at 37°C.

**Purity:** > 92 % as determined by SDS-PAGE

**Endotoxin:** < 1.0 EU per µg of the protein as determined by the LAL method.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from sterile PBS, pH 7.4

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** A630052E07Rik;AI747096;OSF-2;Osf2;peri;PLF;PN

## Immunogen Information:

**Sequence:** Met 1-Gln 811

## Background:

Periostin ( POSTN ), also known as OSF2 (osteoblast specific factor 2), is a heterofunctional secreted extracellular matrix (ECM) protein comprised of four fasciclin domains that promotes cellular adhesion and movement, as well as collagen fibrillogenesis. Postn is expressed in unique growth centers during embryonic development where it facilitates epithelial-mesenchymal transition (EMT) of select cell populations undergoing reorganization. In the adult, Postn expression is specifically induced in areas of tissue injury or areas with ongoing cellular re-organization. In the adult heart Postn is induced in the ventricles following myocardial infarction, pressure overload stimulation, or generalized cardiomyopathy. Although the detailed function of Postn is still unclear, Postn-integrin interaction is thought to be involved in tumor development. Postn is frequently overexpressed in various types of human cancers, stimulating metastatic growth by promoting cancer cell survival, invasion and angiogenesis, and can be a useful marker to predict the behavior of cancer.