

Human Periostin ELISA Kit (OSF2) ab213816

1 References 1 Image

Overview

Product name Human Periostin ELISA Kit (OSF2)

Detection method Colorimetric

Precision	Intra-assay				
	Sample	n	Mean	SD	CV%
	1	16	188pg/ml	8.64	= 4.6%
	2	16	1707pg/ml	124.61	= 7.3%
	3	16	4824pg/ml	192.96	= 4%

	Inter-assay				
	Sample	n	Mean	SD	CV%
	1	24	180pg/ml	11.34	= 8.2%
	2	24	1664pg/ml	136.44	= 8.2%
	3	24	4867pg/ml	199.54	= 4.1%

Sample type Cell culture supernatant, Serum, Cell Lysate, Hep Plasma, EDTA Plasma

Assay type Sandwich (quantitative)

Sensitivity < 10 pg/ml

Range 156 pg/ml - 10000 pg/ml

Assay time 3h 30m

Assay duration Multiple steps standard assay

Species reactivity Reacts with: Human

Product overview The Human Periostin Enzyme-Linked Immunosorbent Assay (ELISA) kit (OSF2) (ab213816) is designed for the quantitative measurement of Human Periostin in cell culture supernatants, cell lysates, serum and plasma (heparin, EDTA).

The ELISA kit is based on standard sandwich enzyme-linked immunosorbent assay technology. A

monoclonal antibody from mouse specific for Periostin/OSF2 has been pre-coated onto 96-well plates. Standards (Expression system for standard: NSO; Immunogen sequence: N22-Q836) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for Periostin/OSF2 is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex is added and unbound conjugates are washed away with PBS or TBS buffer. HRP substrate TMB is used to visualize HRP enzymatic reaction. TMB is catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the Human Periostin/OSF2 amount of sample captured in plate.

**Notes** Periostin, also known as OSF2, is a protein that in humans is encoded by the POSTN gene. The International Radiation Hybrid Mapping Consortium mapped the POSTN gene to chromosome 13. Periostin functions as a ligand for alpha-V/beta-3 and alpha-V/beta-5 integrins to support adhesion and migration of epithelial cells. It is found that periostin was over-expressed by the majority of human primary breast cancers examined. After myocardial infarction, periostin-induced cardiomyocyte cell cycle reentry and mitosis were associated with improved ventricular remodeling and myocardial function, reduced fibrosis and infarct size, and increase angiogenesis.

**Platform** Pre-coated microplate (12 x 8 well strips)

## Properties

**Storage instructions** Store at -20°C. Please refer to protocols.

Components	Identifier	1 x 96 tests
Wash Buffer (25X)		1 x 20ml
ABC Diluent Buffer	Blue Cap	1 x 12ml
Adhesive Plate Seal		4 units
Antibody Diluent Buffer	Green Cap	1 x 12ml
Anti-Human Periostin coated Microplate (12 x 8 wells)		1 unit
Avidin-Biotin-Peroxidase Complex (ABC)		1 x 100µl
Biotinylated anti-Human Periostin antibody		1 x 100µl
Lyophilized recombinant Human Periostin standard		2 vials
Sample Diluent Buffer	Green Cap	1 x 30ml
TMB Color Developing Agent	Black Cap	1 x 10ml
TMB Stop Solution	Yellow Cap	1 x 10ml

**Function** Binds to heparin. Induces cell attachment and spreading and plays a role in cell adhesion. May play a role in extracellular matrix mineralization.

**Tissue specificity** Widely expressed with highest levels in aorta, stomach, lower gastrointestinal tract, placenta, uterus and breast. Up-regulated in epithelial ovarian tumors. Not expressed in normal ovaries.

Also highly expressed at the tumor periphery of lung carcinoma tissue but not within the tumor.  
Overexpressed in breast cancers.

#### Sequence similarities

Contains 1 EMI domain.  
Contains 4 FAS1 domains.

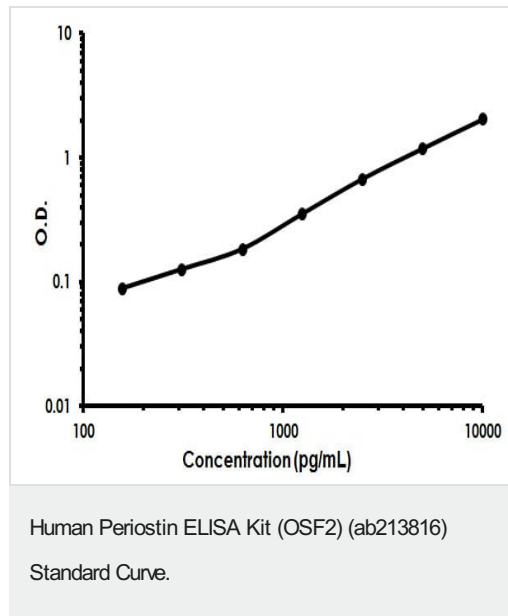
#### Post-translational modifications

Gamma-carboxyglutamate residues are formed by vitamin K dependent carboxylation. These residues are essential for the binding of calcium.

#### Cellular localization

Secreted > extracellular space > extracellular matrix.

## Images



Human Periostin ELISA Kit (OSF2) (ab213816) Standard Curve.

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