

# Rabbit Anti-IGFBP7/FITC Conjugated antibody

## SL5098R-FITC

<b>Product Name:</b>	Anti-IGFBP7/FITC
Chinese Name:	FITC标记的胰岛素样生长因子Binding protein7抗体
Alias:	AGM; Angiomodulin; FSTL2; IBP-7; IBP7; IBP7_HUMAN; IGF binding protein 7; IGF-binding protein 7; IGFBP-7; IGFBP-7; IGFBP-7; IGFBP7; IGFBPRP1; Insulin like growth factor binding protein 7; Insulin-like growth factor-binding protein 7; MAC25; MAC25 protein; PGI2 stimulating factor; PGI2-stimulating factor; Prostacyclin stimulating factor; Prostacyclin-stimulating factor; PSF; RAMSVPS; TAF; Tumor-derived adhesion factor.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Cow, Sheep,
Applications:	IF=1:50-200 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	26kDa
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human IGFBP7 (168-214aa)
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
Product Detail:	background: IGF-BPs form high affinity complexes with both IGF-I and IGF-II and act to control of the distribution, function and activity of IGFs in various cell tissues and body fluids. There are seven named IGF-BPs. IGFBP7 plays a role in skeletal myogenesis by binding to IGF in a manner that inhibits IGF induced differentiation of skeletal

myoblasts, without affecting IGF induced proliferation. Additionally, IGFBP7 suppresses growth and colony formation of prostate and breast cancer cell lines through an IGF independent mechanism, which causes a delay in the G1 phase of the cell cycle, and increased apoptosis. IGFBP7 is expressed in a wide range of normal human tissues and it usually shows reduced expression in cancer cell lines of prostate, breast, colon, and lung origin.

### **Function:**

Binds IGF-I and IGF-II with a relatively low affinity. Stimulates prostacyclin (PGI2) production. Stimulates cell adhesion.

## Subunit:

May interact with VPS24/CHMP3; the relevance of such interaction however remains unclear.

## **Subcellular Location:**

Secreted.

## Post-translational modifications:

N-glycosylated.

#### **DISEASE:**

Defects in IGFBP7 are the cause of retinal arterial macroaneurysm with supravalvular pulmonic stenosis (RAMSVPS) [MIM:614224]. RAMSVPS is an autosomal recessive condition characterized by the bilateral appearance of 'beading' along the major retinal arterial trunks, with the subsequent formation of macroaneurysms. Affected individuals also have supravalvular pulmonic stenosis, often requiring surgical correction.

## Similarity:

Contains 1 Ig-like C2-type (immunoglobulin-like) domain. Contains 1 IGFBP N-terminal domain. Contains 1 Kazal-like domain.

#### Database links:

UniProtKB/Swiss-Prot: Q16270.1

#### **Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.