

FPRP/PTGFRN Protein, Cynomolgus (HEK293, His)

Cat. No.:	HY-P77467
Synonyms:	Prostaglandin F2 receptor negative regulator; CD315; CD9P-1
Species:	Cynomolgus
Source:	HEK293
Accession:	H9ERH4 (R22-K830)
Gene ID:	5738
Molecular Weight:	Approximately 100-130 kDa due to the glycosylation

PROPERTIES

AA Sequence

R V V R V P T G T L	V R V V G T E L V I	P C N V S D Y D G P	S E Q N F D W S F S
S L G S S F V E L A	S T W E V G F P A Q	L Y Q E R L Q R G E	I L L R R T A N D A
V E L H I K N V Q P	S D Q G H Y K C S T	P S T D A T V Q G N	Y E D T V Q V K V L
A D S L H V G P S A	R P P P S L S L R E	G E P F E L R C T A	A S A S P L H T H L
A L L W E L H R G P	A R R N V L A L T H	E G R F H P G L G Y	E Q R Y H S G D V R
L D T V G S D A Y R	L S V S R A L S A D	Q G S Y R C I V S E	W I A E Q G N W Q E
I Q E K A V E V A T	V V I Q P T V L R A	A V P K N V S V A E	G K E L D L T C N I
T T D R A D D V R P	E V T W S F S R T P	D S T L P G S R V L	A R L D R D S L V H
S S P H I A L S H V	D A R S Y H L L V R	D V S K G N S G Y Y	F C H V S L W A P G
H N R S W H K V A E	A V S S P A G V G V	T W L E P D Y Q V Y	L N A S K V P G F A
D D P T E L A C R V	V D T K S G E A N V	R F T V S W Y Y R M	N R R S D D V V T S
E L L A V M D G D W	T L K Y G D R S K Q	R A Q D G D F I F S	K E H T D T F N F R
I Q R T T E E D R G	N Y Y C V V S A W T	K Q R N N S W V K S	K D V F S K P V N I
F W A L E D S V L V	V K A R Q P K P F F	A A G N T F E M T C	K V S S K N I K S P
R Y S V L I T A E K	P V G D L S S P N E	T K Y I I S L D Q D	S V V K L E N W T D
A S R V D G V V L E	K V Q E D E F R Y R	M Y Q T Q V S D A G	L Y R C M V T A W S
P V R G S L W R E A	A T S L S N P I E I	D F Q T S G P I F N	A S V H S D T P S V
I R G D L I K L F C	I I T V E G A A L D	P D D M A F D V S W	F A V H S F G L D K
A P V L L S S L D R	K G I V T T S R R D	W K S D L S L E R V	S V L E F L L Q V H
G S E D Q D F G N Y	Y C S V T P W V K S	P T G S W Q K E A E	I H S K P V F I T V
K M D V L N A F K			

Biological Activity

Measured by its binding ability in a functional ELISA. When Recombinant Human FPRP/PTGFRN is immobilized at 5 µg/mL can bind Biotinylated Recombinant Human CD9. The ED₅₀ for this effect is ≤0.2867 µg/mL.

Appearance

Lyophilized powder

Formulation

Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.

Endotoxin Level

<1 EU/µg, determined by LAL method.

Reconstitution	It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH ₂ O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background

Prostaglandin F2 receptor inhibitor (PTGFRN) is a type I transmembrane Ig superfamily cell adhesion molecule that is upregulated in several cancers, including glioma. PTGFRN manifests as a gene fusion (PTGFRN-NOTCH2) in colorectal cancer and as a point mutation in small-cell lung cancer. It interacts with tetranins (CD9 and CD81), integrins, Ezrin-Radixin-Moesin (ERM) proteins, and gamma-secretase to regulate cell adhesion and migration. It has also been found to be involved in adipocyte maturation, muscle regeneration, tumor angiogenesis, metastasis, inhibition of follicle-stimulating hormone (FSH) and luteinizing hormone (LH) secretion, and plasmodium infection. PTGFRN is overexpressed in glioblastoma and promotes cell growth and radiation resistance through the PI3K-AKT signaling pathway^{[1][2]}.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA