

Rabbit Anti-PTGER2 antibody

SL4196R

Product Name:	PTGER2
Chinese Name:	前列腺素E2受体2抗体
Alias:	EP 2; EP2; Prostaglandin E Receptor EP2; Human prostaglandin E2 receptor; PE2R2_HUMAN; PGE receptor EP2 subtype; PGE2 receptor EP2 subtype; Prostaglandin E receptor 2 EP2 subtype; Prostaglandin E receptor 2 subtype EP2 53kDa; Prostaglandin E receptor 2 subtype EP2; Prostaglandin E2 receptor; Prostaglandin E2 receptor; Prostaglandin E2 receptor; PTGER 2; PTGER2.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Pig, Cow, Rabbit, Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-F=1:400-800Flow-Cyt=1µg/TestIF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	40kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Prostaglandin E Receptor EP2:271-358/358 <cytoplasmic></cytoplasmic>
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.
PubMed:	PubMed
Product Detail:	Prostaglandins are produced by the metabolism of arachidonic acid. Prostaglandin E2 is one of the five physiologically significant prostanoids known. Its wide spectrum of

physiologic and pharmacologic effects in various tissues is mediated through binding to the Prostaglandin E2 receptors (EP1, EP2, EP3 & EP4). These include effects on the immune, endocrine, cardiovascular, renal and reproductive systems as well as smooth muscle. It is also one of the most abundant of the prostanoid family in the brain where it plays an important role in many neural functions, particularly in newborn babies, and as a mediator of inflammation. Prostaglandin E2 signals through a family of G-protein coupled receptors known as EP receptors. There are 4 subtypes of EP receptors, known as EP1, EP2, EP3 and EP4. EP2 receptors are 358 amino acid proteins with a short third intracellular loop. EP2 receptors stimulate adenylyl cyclase by their coupling to Gs and do not undergo Prostaglandin E2 induced internalization. The EP2 receptors is involved with the contration and relaxation of smooth muscle tissue. These receptors are mainly localized in lung and placental tissues and in smooth muscle.

Function:

Receptor for prostaglandin E2 (PGE2). The activity of this receptor is mediated by G(s) proteins that stimulate adenylate cyclase. The subsequent raise in intracellular cAMP is responsible for the relaxing effect of this receptor on smooth muscle.

Subcellular Location:

Cell membrane; Multi-pass membrane protein.

Tissue Specificity:

Placenta and lung.

Similarity:

Belongs to the G-protein coupled receptor 1 family.

SWISS:

P43116

Gene ID:

5732

Database links:

Entrez Gene: 282329 Cow

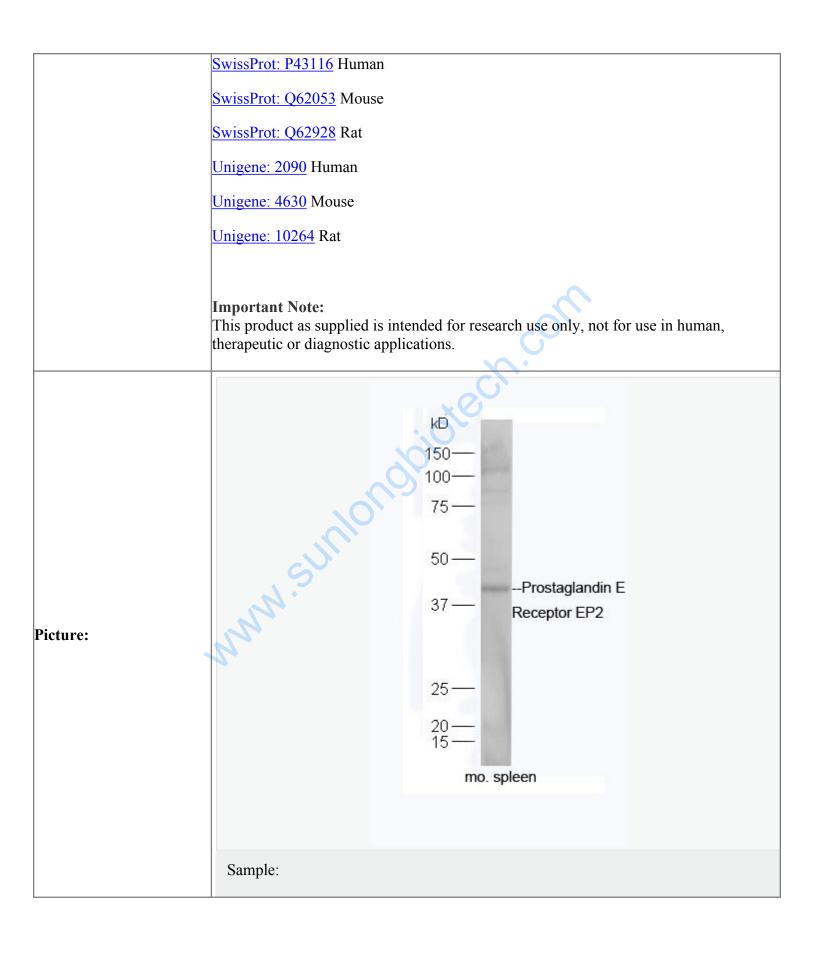
Entrez Gene: 5732 Human

Entrez Gene: 19217 Mouse

Entrez Gene: 100360765 Rat

Entrez Gene: 81752 Rat

Omim: 176804 Human



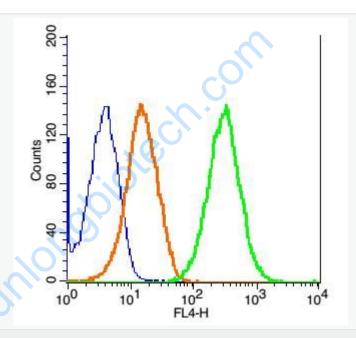
Spleen (Mouse) Lysate at 40 ug

Primary: Anti-Prostaglandin E Receptor EP2 (SL4196R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 40 kD

Observed band size: 40 kD



Blank control(blue): A549(fixed with 2% paraformaldehyde (10 min)).

Primary Antibody: Rabbit Anti-Prostaglandin E Receptor EP2/AF647 Conjugated antibody (SL4196R), Dilution: 1µg in 100 µL 1X PBS containing 0.5% BSA; Isotype Control Antibody: Rabbit IgG/AF647(orange) ,used under the same conditions.