

Product datasheet for **AM05329PU-N**

EP2 (PTGER2) Mouse Monoclonal Antibody [Clone ID: 3F12]

Product data:

Product Type:	Primary Antibodies
Clone Name:	3F12
Applications:	WB
Recommended Dilution:	Western Blot (1-5 µg/ml). Positive Control: Porcine brain lysate.
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG
Clonality:	Monoclonal
Immunogen:	Hybridoma produced by the fusion of splenocytes from mice immunized with recombinant human EP2 and EP3 receptor protein and mouse myeloma cells.
Formulation:	PBS containing 0.08% Sodium Azide as preservative. State: Purified State: Liquid purified IgG fraction.
Concentration:	lot specific
Conjugation:	Unconjugated
Storage:	Store the antibody at -20°C. Avoid repeated freezing and thawing.
Stability:	Shelf life: One year from despatch.
Gene Name:	prostaglandin E receptor 2
Database Link:	Entrez Gene 5732 Human P43116



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Background:

Prostaglandins (PG's) are produced by the metabolism of arachidonic acid. PGE-2 is one of the five physiologically significant prostanoids known. Its wide spectrum of physiologic and pharmacologic effects in various tissues are mediated through binding to the PGE-2 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. PGE-2 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 PGE-2-induced internalization. EP3 receptors are 365-425 amino acid proteins. There are currently 4 known isoforms of EP3 receptors named EP3A, 3B, 3C and 3D. EP3 receptors are involved in water absorption, gastric acid secretion, uterine contraction, neurotransmitter release and the hydrolysis of fat cells (lipolysis) and also act as a mediator of neural inflammation.

Synonyms:

Prostaglandin E receptor 2, Prostanoid EP2 receptor, Prostaglandin E2 receptor EP2, PGE receptor EP2, PGE2 receptor EP2 subtype, EP2