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Prostaglandin-E2 receptor EP2/EP3. Mouse Monoclonal Antibody

BACKGROUND

Prostaglandins (PG's) are produced by the metabolism of arachidonic acid. PGE-2 is one of the five physiologically significant prostanoids known. It's 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.

IMMUNOGEN

Hybridoma produced by the fusion of splenocytes from mice immunized with recombinant human EP2 and EP3 receptor protein and mouse myeloma cells.

POSITIVE CONTROL/TISSUE EXPRESSION

Porcine brain lysate

COMMENTS

This antibody can be used for Western blot analysis (1-5 $\mu\text{g/ml}$). Optimal concentration should be evaluated by serial dilutions.

ORDERING INFORMATION

CATALOG NUMBER
X1522M

SIZE

100 μg

FORM

Unconjugated

HOST/CLONE

Mouse Clone 3F12

FORMULATION

Provided as solution in phosphate buffered saline with 0.08% sodium azide

CONCENTRATION

See vial for concentration

ISOTYPE

IgG

APPLICATIONS

Western Blot

SPECIES REACTIVITY

Human, Mouse, Rat

ACCESSION NUMBER

,

PURIFICATION

Protein A/G Chromatography

SHIP CONDITIONS

Ship at ambient temperature, freeze upon arrival

STORAGE CUSTOMER

Product should be stored at -20°C. Aliquot to avoid freeze/thaw cycles

STABILITY

Products are stable for one year from purchase when stored properly

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