Prostaglandin-E2 receptor EP3. Mouse Monoclonal Antibody
Prostaglandin E2 Receptor Subtype EP3

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. EP3 receptors are 365-425 amino acid proteins. There are currently 4 known isoforms of EP3 receptors named EP3A, 3B, 3C and 3D. Each of has different physiological function, but differ only in the carboxyl terminus and how they couple to their respective G-proteins. EP3 receptors are involved in water absorption, gastric acid secretion, uterine contraction, neurotransmitter release and the hydrolysis of fat cells (lipolysis). EP3 receptors also act as a mediator of neural inflammation. These receptors are mainly localized in the brain, kidney, stomach, uterus and ovaries.

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

ORDERING INFORMATION

<table>
<thead>
<tr>
<th>CATALOG NUMBER</th>
<th>SIZE</th>
<th>FORM</th>
<th>HOST/CLONE</th>
<th>FORMULATION</th>
<th>CONCENTRATION</th>
<th>ISOTYPE</th>
<th>APPLICATIONS</th>
<th>SPECIES REACTIVITY</th>
<th>ACCESSION NUMBER</th>
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</thead>
<tbody>
<tr>
<td>X1492M</td>
<td>100 µg</td>
<td>Unconjugated</td>
<td>Mouse Clone 5F5</td>
<td>Provided as solution in phosphate buffered saline with 0.08% sodium azide</td>
<td>See vial for concentration</td>
<td>IgG2a</td>
<td>Western Blot</td>
<td>Rat, Bovine, Human</td>
<td>P34980, P34979, P43115</td>
</tr>
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</table>

Western blot analysis using EP3 antibody on bovine brain lysate at 1 µg/ml.

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For research use only. Not for use in human diagnostics or therapeutics.
**Comments**

This antibody can be used for Western blot analysis (1-5 µg/ml). Optimal concentration should be evaluated by serial dilutions.

**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

**References**


**Product Specific References**