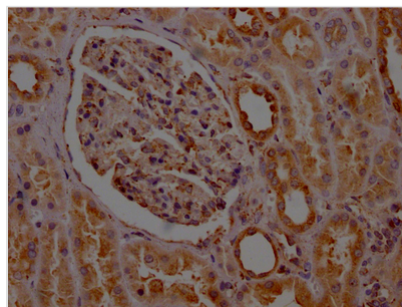




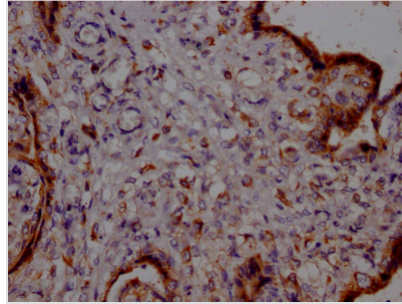
# PTGER2 Recombinant Monoclonal Antibody

<b>Product Code</b>	CSB-RA585843A0HU
<b>Storage</b>	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
<b>Uniprot No.</b>	P43116
<b>Immunogen</b>	A synthesized peptide derived from human PTGER2
<b>Species Reactivity</b>	Human
<b>Tested Applications</b>	ELISA, IHC; Recommended dilution: IHC:1:50-1:200
<b>Relevance</b>	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.
<b>Form</b>	Liquid
<b>Conjugate</b>	Non-conjugated
<b>Storage Buffer</b>	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
<b>Purification Method</b>	Affinity-chromatography
<b>Isotype</b>	Rabbit IgG
<b>Clonality</b>	Monoclonal
<b>Product Type</b>	Recombinant Antibody
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Research Area</b>	Cancer; Metabolism; Signal transduction
<b>Gene Names</b>	PTGER2
<b>Clone No.</b>	8D8

## Image



IHC image of CSB-RA585843A0HU diluted at 1:100 and staining in paraffin-embedded human kidney tissue performed on a Leica Bond<sup>TM</sup> system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4? overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.



IHC image of CSB-RA585843A0HU diluted at 1:100 and staining in paraffin-embedded human placenta tissue performed on a Leica Bond<sup>TM</sup> system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4? overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.

## Description

The PTGER2 recombinant monoclonal antibody is ideal for identifying human PTGER2 protein in ELISA and IHC assays. It is produced utilizing recombinant DNA technology, where the gene encoding the PTGER2 monoclonal antibody is synthesized following the sequencing of the cDNA of the PTGER2 antibody-producing hybridomas. The hybridomas are generated by fusing myeloma cells and B cells isolated from an animal that was immunized with a synthesized peptide derived from human PTGER2. The synthesized gene is then cloned into a vector. And the recombinant vector is transfected into cells for cultivation. The resulting PTGER2 recombinant monoclonal antibody is purified through affinity chromatography from the cell culture supernatant.

The PTGER2 protein is a G protein-coupled receptor primarily expressed on the cell surface of various cell types, including smooth muscle cells, endothelial cells, and immune cells. The main function of PTGER2 is to bind to the PGE2 molecule and initiate downstream signaling cascades that regulate a variety of cellular processes, including inflammation, fever, pain, and cardiovascular function. Activation of PTGER2 can lead to the activation of adenylate cyclase and the subsequent production of cAMP, which can activate downstream signaling pathways such as PKA and the MAPK pathway. PTGER2 has been implicated in several physiological and pathological processes, including asthma, rheumatoid arthritis, cardiovascular disease, and cancer.