

Rabbit Anti-COX2 [MD144R]: RM0200, RM0200RTU7

Intended Use: For Research Use Only

Description: COX2, also known as prostaglandin-endoperoxidase synthase 2 (PTGS2), is an immediate-early gene that encodes a critical enzyme for the conversion of arachidonic acids to prostaglandins. Functionally, COX2 exists as a homodimer, consisting of two 70kDa subunits. COX2 derived prostanoids have been shown to increase resistance to apoptosis, promote angiogenesis, induce metastasis and invasion, and impair immune surveillance. Immunohistochemical expression of COX2 has been described in multiple tissue types. While COX2 expression is limited in most normal tissues, it is induced by various stimuli and elevated during inflammatory responses. Reports have associated COX2 expression with cancers from multiple tissues. Lung, colon, gastric, prostate, and breast carcinomas were described to have elevated levels of COX2. Further, elevated COX2 levels has been associated with poor prognosis and decreased survival in patients with breast cancer.

Specifications:

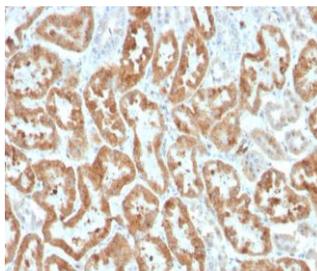
Clone: MD144R
 Source: Rabbit
 Isotype: IgG
 Reactivity: Human
 Immunogen: Synthetic peptide corresponding to human COX2 aa504-604
 Localization: Cytoplasm, membrane
 Formulation: Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN₃)
 Storage: Store at 2°- 8°C
 Applications: IHC
 Package:

Description	Catalog No.	Size
COX2 Concentrated	RM0200	1 ml
COX2 Prediluted	RM0200RTU7	7 ml

IHC Procedure*:

Positive Control Tissue: Lung, colon cancer
 Concentrated Dilution: 50-200
 Pretreatment: Tris EDTA pH9.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
 Incubation Time and Temp: 30-60 minutes @ RT
 Detection: Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



FFPE human kidney stained with anti-COX2 using DAB

References:

1. A high-fat diet activates oncogenic Kras and COX2 to induce development of pancreatic ductal adenocarcinoma in mice. Philip B, et al. Gastroenterology. Dec;145(6):1449-58, 2013.
2. Decreased TGFbeta signaling and increased COX2 expression in high risk women with increased mammographic breast density. Yang WT, et al. Breast Cancer Res Treat. Jan;119(2):305-14, 2010.

Doc. 100-RM0200
Rev. B