

**Rabbit Anti-COX2 [EP293]: RM0362**

**Intended Use:** For Research Use Only

**Description:** COX-2, 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, COX-2 exists as a homodimer, consisting of two 70kDa subunits. COX-2 derived prostanoids have been shown to increase resistance to apoptosis, promote angiogenesis, induce metastasis and invasion, and impair immune surveillance. Immunohistochemical expression of COX-2 has been described in multiple tissue types. While COX-2 expression is limited in most normal tissues, it is induced by various stimuli and elevated during inflammatory responses. Reports have associated COX-2 expression with cancers from multiple tissues. Lung, colon, gastric, prostate, and breast carcinomas were described to have elevated levels of COX-2. Further, elevated COX-2 levels has been associated with poor prognosis and decreased survival in patients with breast cancer.

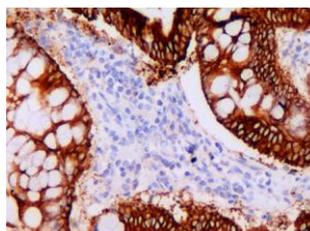
**Specifications**

Clone: EP293  
Source: Rabbit  
Isotype: IgG  
Reactivity: Human  
Localization: Membrane, cytoplasm  
Formulation: Antibody in PBS pH7.5, containing 0.2% BSA and <0.1% sodium azide (NaN<sub>3</sub>)  
Storage: Store at 2°- 8°C  
Applications: IHC  
Package:

Description	Catalog No.	Size
COX2 Concentrated	RM0362	1 ml

**IHC Procedure**

Positive Control: Lung, colon carcinoma  
Concentrated Dilution: 50-200  
Pretreatment: Citrate pH6.0 or EDTA pH8.0, 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 colon adenocarcinoma tissue stained with anti-Claudin 8 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.