

Mouse Anti-COX2 [COX2/2377]: MC0286, MC0286RTU7

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: COX2/2377
Source: Mouse
Isotype: IgG2a/k
Reactivity: Human
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	MC0286	1 ml
COX2 Prediluted	MC0286RTU7	7 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 carcinoma tissue 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.

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