## Cycloxygenase-2 Recombinant Monoclonal Rabbit Antibody (COX2/3232R)



## **Product Description**

Prostaglandins are a diverse group of autocrine and paracrine hormones that mediate many cellular and physiologic processes. Prostaglandin H2 (PGH2) is an intermediate molecule in formation of the prostaglandins. Cyclooxygenase-1 (Cox-1) and cyclooxygenase-2 (Cox-2) are prostaglandin synthases that catalyze the formation of PGH2 from arachidonic acid (AA). Cox-1 and Cox-2 are isozymes of prostaglandin-endoperoxidase synthase (PTGS). Cox-1 is constitutively expressed in most tissues and is thought to serve in general housekeeping functions. Cox-2 is efficiently induced in migratory cells responding to pro-inflammatory stimuli and is considered to be an important mediator of inflammation. Both enzymes are targets for the nonsteroidal therapeutic anti-inflammatory drugs, NSAIDs. COX2 expression is significantly increased in 85-90% of human colorectal adenocarcinomas whereas levels of COX-1 are not changed.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the CF® Dye Brochure for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

Stock status: Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email <a href="mailto:order@biotium.com">order@biotium.com</a> to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 3232, Anti-Cycloxygenase-2 (COX2/3232R)

## Product attributes

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| Product attributes                    |   |  |  |
|---------------------------------------|---|--|--|
| Antibody number                       | #3232   |  |  |
| Antibody reactivity (target)          | Cycloxygenase-2   |  |  |
| Antibody type                         | Primary   |  |  |
| Host species                          | Rabbit  |  |  |
| Clonality                             | Recombinant Monoclonal  |  |  |
| Clone                                 | COX2/3232R  |  |  |
| Isotype                               | IgG   |  |  |
| Molecular weight                      | 70-72 kDa   |  |  |
| Synonyms                              | Glucocorticoid-regulated inflammatory Prostaglandin G/H synthase; GRIPGHS; Macrophage activation-associated marker protein P71/73; PES-2; PGG/HS; PGHS-2; Prostaglandin endoperoxide synthase 2; Prostaglandin endoperoxide synthase 2 (PTGS2); TIS10 |  |  |
| Human gene symbol                     | PTGS2   |  |  |
| Entrez gene ID                        | 5743  |  |  |
| SwissProt                             | P35354  |  |  |
| Unigene                               | 196384  |  |  |
| Immunogen                             | Recombinant human COX2 protein fragment (around aa 442-572) (exact sequence is proprietary)   |  |  |
| Verified antibody applications        | IHC (FFPE) (verified)   |  |  |
| Antibody target cellular localization | Cytoplasmic   |  |  |
| Species reactivity                    | Human   |  |  |
| Positive control                      | Human colon or lung carcinoma tissue (IHC).   |  |  |
| Shipping condition                    | Room temperature  |  |  |
| Storage Conditions                    | Store at 2 to 8 °C, Protect fluorescent conjugates from light,<br>Note: store BSA-free antibodies at -10 to -35 °C  |  |  |
| Regulatory status                     | For research use only (RUO)   |  |  |
| Antibody/conjugate formulation        | Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide   |  |  |
| Shelf life                            | Guaranteed for at least 24 months from date of receipt when stored as recommended   |  |  |
| Product origin                        | Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in  |  |  |

Chinese hamster ovary cells. Inquire for the specific lot.

Email: techsupport@biotium.com

| Antibody # prefix | Conjugation           | Ex/Em (nm) | Laser line | Detection channel           | Dye Features     |
|-------------------|-----------------------|------------|------------|-----------------------------|------------------|
| BNC04             | CF®405S               | 404/431    | 405        | DAPI (microscopy),<br>AF405 | CF®405S Features |
| BNC88             | CF®488A               | 490/515    | 488        | GFP, FITC                   | CF®488A Features |
| BNC68             | CF®568                | 562/583    | 532, 561   | RFP, TRITC                  | CF®568 Features  |
| BNC94             | CF®594                | 593/614    | 561        | Texas Red®                  | CF®594 Features  |
| BNC40             | CF®640R               | 642/662    | 633-640    | Cy®5                        | CF®640R Features |
| BNC47             | CF®647                | 650/665    | 633-640    | Cy®5                        | CF®647 Features  |
| BNC74             | CF®740                | 742/767    | 633-685    | 775/50                      | CF®740 Features  |
| BNCB              | Biotin                | N/A        | N/A        | N/A                         |                  |
| BNUB              | Purified              | N/A        | N/A        | N/A                         |                  |
| BNUM              | Purified,<br>BSA-free | N/A        | N/A        | N/A                         |                  |

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