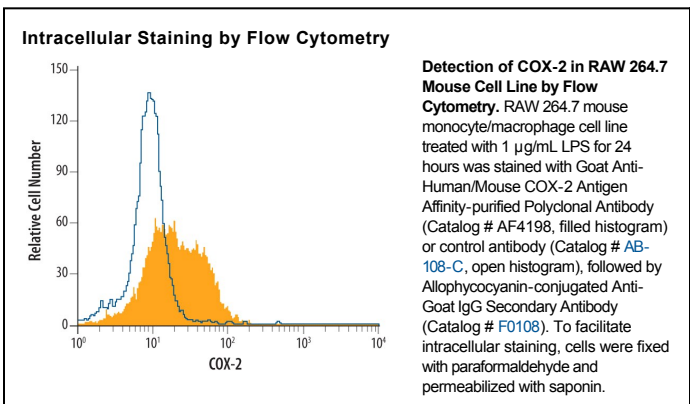
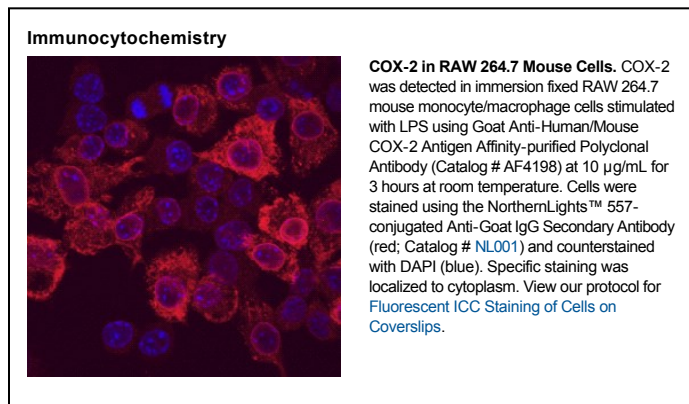
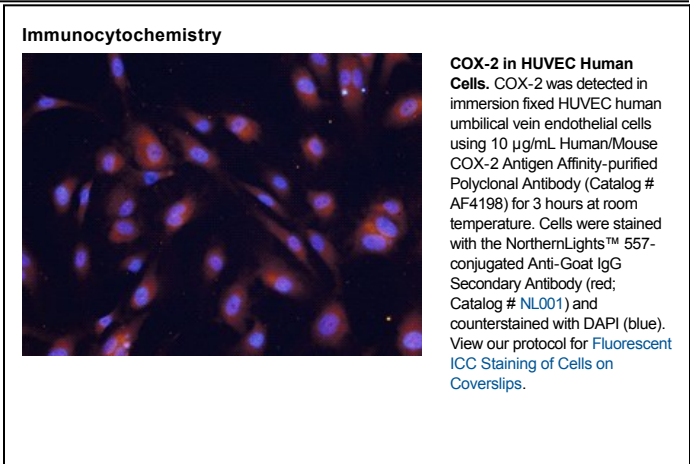
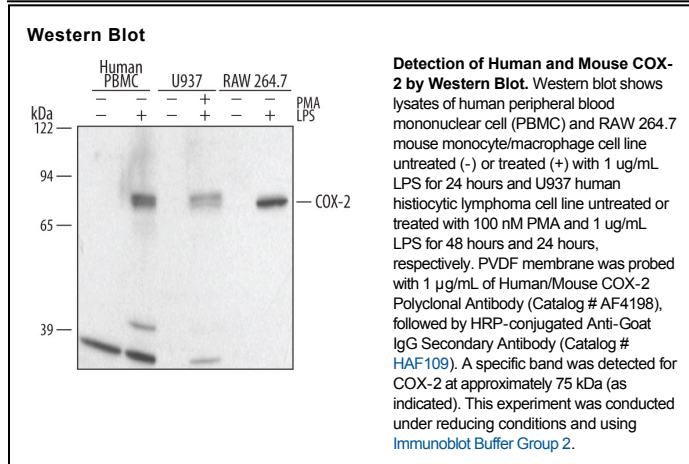


DESCRIPTION	
<b>Species Reactivity</b>	Human/Mouse
<b>Specificity</b>	Detects human and mouse COX-2 in Western blots. In Western blots, less than 1% cross-reactivity with recombinant human COX-1 is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human COX-2 Ala18-Leu604 Accession # P35354
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

**APPLICATIONS**  
**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
<b>Western Blot</b>	1 µg/mL	See Below
<b>Immunocytochemistry</b>	5-15 µg/mL	See Below
<b>Intracellular Staining by Flow Cytometry</b>	2.5 µg/10 <sup>6</sup> cells	See Below
<b>CyTOF-ready</b>	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

**DATA**



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"><li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li><li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li><li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li></ul>

## BACKGROUND

Cyclooxygenase-2 (COX-2) also known as prostaglandin G/H synthase 2 (PGHS2) is a 70 kDa microsomal enzyme that belongs to the prostaglandin G/H synthase family. It is inducibly-expressed by a number of cell types, including fibroblasts, vascular smooth muscle cells, endothelium, and monocytes. Functionally, COX-2 is a homodimer that catalyzes two steps in the conversion of arachadonic acid to prostaglandin H<sub>2</sub>. Mature human COX-2 is 587 amino acids (aa) in length and contains one EGF-like domain (aa 18-55), a potential membrane interacting region (aa 277-292) and a globular catalytic domain (aa 293-604). At least one splice form exists that shows an 11 aa substitution for the C-terminal 451 amino acids. Mature human COX-2 shows 87% aa identity to mouse COX-2.