

## DESCRIPTION

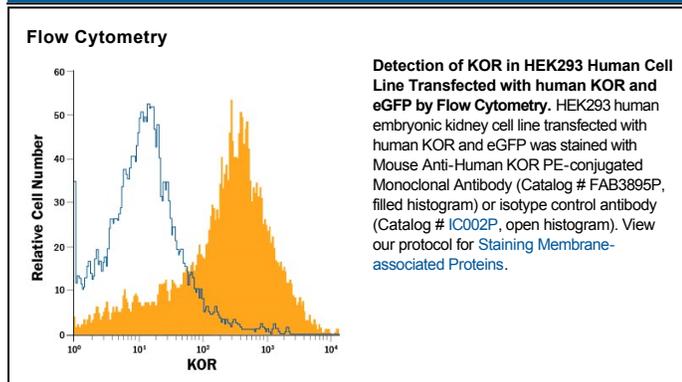
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Stains human KOR transfectants but not irrelevant transfectants in flow cytometry.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 387301
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	NS0 mouse myeloma cell line transfected with human KOR Met1-Val380 Accession # P41145
<b>Conjugate</b>	Phycoerythrin Excitation Wavelength: 488 nm Emission Wavelength: 565-605 nm
<b>Formulation</b>	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details.  *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

## 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>Flow Cytometry</b>	10 $\mu$ L/10 <sup>6</sup> cells	See Below

## DATA



## PREPARATION AND STORAGE

**Shipping** The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

**Stability & Storage** **Protect from light. Do not freeze.**

- 12 months from date of receipt, 2 to 8 °C as supplied.

## BACKGROUND

KOR ( $\kappa$ -Opioid Receptor) is a 45-58 kDa 7TM glycoprotein receptor that belongs to the Class A (Rhodopsin) family of GPCRs. It exists on the cell surface as either a monomer or heterodimer with the  $\mu$ -Opioid Receptor (in females), and binds dynorphins. Activation of KOR impacts the release of neurotransmitters such as GABA, glutamate and dopamine. In the case of dopamine, it inhibits its release, blocking reward feedback effects associated with drug abuse. Its negative regulation is not limited to reward centers, however, as KOR activation also interrupts thermal, visceral and inflammatory-induced pain. Neurons and axonal projections from the dorsal raphe, ventral tegmentum, amygdala and nucleus accumbens have all been found to express KOR isoforms. The human KOR extracellular domains share 90% amino acid sequence identity with mouse KOR extracellular domains.