R&D Ab ®

Research & Diagnostic Antibodies

2645 W. Cheyenne Ave, N. Las Vegas, NV 89032 Phone: 702-638-7800

IgG Fraction of Rabbit Anti-Kappa Opioid Receptor Serum

AS-3964G Lot # 10743

This IgG fraction was prepared by precipitation, dialysis, and chromatography from an antiserum that was raised in a rabbit which was immunized with a peptide analogue of the carboxyl terminal of the kappa opioid receptor covalently attached onto a carrier protein. This IgG fraction has been shown to be specific for the COOH terminal of the kappa opioid receptor, is suitable for immunocytochemical and western immunoblotting detection of the receptor, and has been characterized by western blotting, ELISA, and cell staining techniques. Dilute the lyophilized antiserum with 0.1 ml of 10 mg/ml BSA is PBS for the equivalent of whole antiserum, or with additional buffer for more dilute antiserum. This vial contains 2.25 mg of purified IgG.

Antiserum Specificity

Polypeptide	% Cross Reactivity
Kappa Opioid Receptor (346-380)	100%
Kappa Opioid Receptor	90%
Mu Opioid Receptor (391-398)	0
Mu Opioid Receptor	0
Delta Opioid Receptor (360-371)	0
Delta Opioid Receptor	0

Immunocytochemical Staining

This IgG fraction has been found to stain specific cells in various regions of PLP fixed rat brain sections known to express the kappa opioid receptor using ABC techniques at a concentration of 10 μg per ml. These include the nucleus accumbens, olfactory tubercule, caudate putamen, and portions of the amygdala. For information on PLP fixative see the FAQ page on our web site at www.RDAbs.com.

Western Immunoblot

Western immunoblots using whole rat brain homogenate have been successful at a concentration of 40μg per ml.

Western Blotting Protocol

1. After SDS-PAGE (on either 4-15% gradient gels or single percentage gels, such at 12% gels) and electrophoretic transfer to PVDF membrane, block the membrane overnight with 2% normal goat serum in TBS/Tween-20 buffer.
2. Wash x 2 with TBS/Tween-20.
3. Apply the IgG fraction after dilution to at least 40 μg per ml (Note: higher dilutions may be needed). Use 2% normal goat serum in TBS/Tween-20 as buffer for the primary antibody. Let the primary antibody bind for 2-4 hours.
4. Wash x 3 with TBS/Tween-20.
5. Apply affinity purified HRP-goat anti-rabbit IgG antiserum diluted 1:2500 (dilution may vary depending upon supplier) in 2% normal goat serum in TBS/Tween-20. Incubate 1-2 hours. Note: greater sensitivity may be achieved using ABC techniques.
6. Wash x 4 for 5 minute/wash with TBS/Tween-20.
7. Develop color using the enhanced DAB reaction.