

# **Research & Diagnostic Antibodies**

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# IgG Fraction of Rabbit Anti-Delta Opioid Receptor Serum

AS-3922G Lot # 8179

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 delta opioid receptor covalently attached onto a carrier protein. The antiserum has been shown to be specific for the COOH terminal of the delta opioid receptor and has been characterized by western blotting, ELISA, and cell staining techniques. The IgG fraction is suitable for immunocytochemical and western immunoblotting detection of the receptor. Dilute the lyophilized antibody with 0.1 ml of 10 mg/ml BSA in PBS for the equivalent concentration in whole antiserum, or with additional buffer for more dilute antibody. This vial contains 1.69 mg of purified IgG.

### **Antiserum Specificity**

Polypeptide	% Cross Reactivity
Delta Opioid Receptor (360-372)	100
Delta Opioid Receptor	60
Mu Opioid Receptor (391-398)	0
Mu Opioid Receptor	0
Kappa Opioid Receptor (346-380)	0
Kappa 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 delta opioid receptor using ABC techniques at a concentration of 20µg per ml. 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 50 µg 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 50 µgm 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.