**BACKGROUND**

Morphine, the most powerful opiate analgesic drug in opium, acts directly on synapses of the arcuate nuclei within the central nervous system to relieve pain. It is a highly addictive drug, to which tolerance as well as physical and psychological dependences quickly develop. Administered as intravenous, subcutaneous or epidural injections, Morphine creates an profound contraction sensation in the muscles due to histamine release and also produces a “rush” mediated by different receptors in the central nervous system. Morphine is a phenanthrene opioid receptor agonist. By binding to µ opioid receptors within the central nervous system associated with analgesia, sedation, physical dependence and respiratory depression, the euphoric effects of Morphine are quickly followed by withdrawal symptoms.

**REFERENCES**


**SOURCE**

Morphine (3A6) is a mouse monoclonal antibody raised against Morphine conjugated to BSA.

**PRODUCT**

Each vial contains 100 µg IgG1 in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**APPLICATIONS**

Morphine (3A6) is recommended for detection of Morphine by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

**DATA**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

**STORAGE**

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.