Anti-Morphine [12D4] Standard Size Ab00521-1.6

This is a Fab fragment with a his-tag.

This reformatted mouse antibody was made using the variable domain sequences of the original Mouse IgG1 format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Mouse Fab fragment, His-Tagged, Lambda
Clone Number: 12D4
Alternative Name(s) of Target: Morphium; (5alpha,6alpha)-17-Methyl-7,8-didehydro-4,5-epoxymorphinan-3,6-diol
UniProt Accession Number of Target Protein:
Published Application(s): WB, ELISA
Published Species Reactivity: Species independent
Immunogen: Morphine-6-hemisuccinate conjugated with BSA.
Specificity: The antibody binds to morphine with an affinity (Kd) of 46 nM.
Application Notes: The antibody binds specifically to morphine, an alkaloid opiate drug derived from the opium poppy administered for the management of narcotic pain. Morphine exerts its effects by binding to µ opiate receptors in the central nervous system and gastrointestinal tract, leading to analgesia and sedation, thereby increasing the patient's tolerance to pain. The monoclonal antibody 12D4 recognises the N-methyl to N-allyl substitution in the conversion of morphine to nalorphine.
Antibody First Published in: Glasel JA, Bradbury WM, Venn RF. Properties of murine anti-morphine antibodies. Mol Immunol. 1983 Dec;20(12):1419-22. PMID:6361525
Note on publication: Describes the isolation of four high affinity monoclonal antibodies against morphine.

Product Form

Size: 200 µg Purified antibody.
Purification: Purified by Immobilized Metal Affinity Chromatography
Supplied In: PBS with 0.02% Proclin 300.
Storage Recommendation: Store at 4^{o}C for up to 3 months. For longer storage, aliquot and store at -20^{o}C.
Concentration: 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic

procedures for humans or animals.