

Anti-Morphine [12D4] Bulk Size Ab00521-1.6-BT

Recombinant monoclonal antibody to Morphine. Manufactured using AbAb's Recombinant Platform with variable regions (i.e. specificity) from the hybridoma 12D4. This is a Fab fragment with a his-tag.

Isotype and Format: Mouse Fab fragment, His-Tagged, Lambda

Clone Number: 12D4

Alternative Name(s) of Target: (5 α ,6 α)-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: 1 mg Purified antibody in bulk size.

Purification: Purified by Immobilized Metal Affinity Chromatography

Supplied In: PBS only.

Storage Recommendation: Store at 4°C for up to 3 months. Note, this antibody is provided without added preservatives, it is therefore recommended this antibody be handled under sterile conditions. For longer storage, aliquot and store at -20°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.