

Anti-Morphine [12D4] Standard Size Ab00521-1.7

This antibody is in our proprietary AbFab2™ recombinant F(ab2) format - based on Mouse IgG1 sequence with a short dimerization domain to improve stability and 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 F(ab)2, AbFab2™ His-Tagged, Lambda

Clone Number: 12D4

Alternative Name(s) of Target: Morphinum; (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°C for up to 3 months. 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.