

## Anti-Digoxin [26 / 10] Standard Size Ab00494-10.7

This antibody is in our proprietary AbFab2™ recombinant F(ab2) format - based on Human IgG1 sequence with a short dimerization domain to improve stability and a his tag.

This chimeric human antibody was made using the variable domain sequences of the original Mouse IgG2a format, for improved compatibility with existing reagents, assays and techniques.

**Isotype and Format:** Human F(ab)2, AbFab2™ His-Tagged, Kappa

**Clone Number:** 26 / 10

**Alternative Name(s) of Target:** Digitalis

**UniProt Accession Number of Target Protein:**

**Published Application(s):** RIA, ELISA

**Published Species Reactivity:** Digitalis lanata

**Immunogen:** Spleen cells from A/J mice immunized with digoxin coupled to human serum albumin (Dig-HSA).

**Specificity:** The antibody binds digoxin with an affinity (Kd) of 9 nM.

**Application Notes:** The antibody is specific for digoxin, a cardiac glycoside derived from the foxglove plant. Digoxin is administered for the therapeutic treatment of heart conditions such as atrial fibrillation, atrial flutter and heart failure, and acts by inhibiting the Na<sup>+</sup>/K<sup>+</sup> ATPase. However, the drug has a very narrow therapeutic index and can cause toxic side effects. The Fab fragment prepared from 26-10 that neutralises the activity of digoxin and can be used as an antidote in case of overdose of digitalis. Anti-digoxin monoclonal antibodies can also be used to measure serum levels of the drug as a guide to therapy, and are useful in the investigation of the kinetics of interaction between antibody and antigen.

**Antibody First Published in:** Mudgett-Hunter M, Anderson W, Haber E, Margolies MN. Binding and structural diversity among high-affinity monoclonal anti-digoxin antibodies. Mol Immunol. 1985 Apr;22(4):477-88. [PMID:4033667](#)

**Note on publication:** Describes the generation of high-affinity monoclonal anti-digoxin antibodies using the hybridoma technology. The antibodies can be useful for the study of structure-function relationships between antibody binding site and antigenic determinants.

## 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.