

Anti-ssDNA/dsDNA [m3D8] Standard Size Ab00347-1.7

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.

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

Clone Number: m3D8

Alternative Name(s) of Target: single-/double-strand DNA; desoxyribonucleic acid; dsDNA; ssDNA

UniProt Accession Number of Target Protein:

Published Application(s): hydrololysis, SPR, ELISA

Published Species Reactivity: Species independent

Immunogen: 3'-biotin oligodeoxynucleotide ss(dN)40 with

N=CCATGAGTGATAACACTGCGGCCAACTTACTTCTGACAAC

Specificity: Binds unspecifically to double- and single-stranded DNA oligomers.

Application Notes: This catalytic antibody binds to DNA oligomers both single- and double-stranded, irrespective of the sequence, showing DNA-hydrolytic activity. DNA is the principle storage of genetic information and usually sequestered within the nucleus in Eukaryotes. Extracellular DNA is a key danger signal for the immune system and an antigen to disease-causing auto-antibodies (incl. DNA-hydrolysing antibodies) e.g. in Systemic Lupus Erythematosus. Antibody formats comprising different numbers of variable domains may be useful tools in investigating the significance of these catalytic antibodies in disease.

Antibody First Published in: Kim et al. 2006 Heavy and light chain variable single domains of an anti-DNA binding antibody hydrolyze both double- and single-stranded DNAs without sequence specificity.

Journal of Biological Chemistry 2006; 281(22):15287-1595 [PMID:16551636](#)

Note on publication: Describes binding studies on mAB 3D8 on different types of oligos (ssDNA, dsDNA, dT:dA, dN:dN etc) using ELISA and SPR.

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.