

## Anti-Quadruplex DNA [1H6] Standard Size Ab00389-1.4

This antibody was created using our proprietary Fc Silent™ engineered Fc domain containing key point mutations that abrogate binding to Fc gamma receptors.

This reformatted mouse antibody was made using the variable domain sequences of the original Mouse IgG2b format, for improved compatibility with existing reagents, assays and techniques.

**Isotype and Format:** Mouse IgG1, [Fc Silent™](#), Kappa

**Clone Number:** 1H6

**Alternative Name(s) of Target:** G4 DNA

**UniProt Accession Number of Target Protein:**

**Published Application(s):** ELISA, IF, IHC

**Published Species Reactivity:** Species independent

**Immunogen:** Oxy-2 or d(TTTTGGGG)2.

**Specificity:** The antibody binds to quadruplex DNA with a K<sub>d</sub> of 0.33 nM. Binds to both types of quadruplex DNA, Oxy-2 (d(TTTTGGGG)2) and Ver-3 (d(TGGGGG(TTAGGG)2T).

**Application Notes:** This antibody binds to quadruplex DNA, which is generated through the association of four guanines bound through Hoogsteen base pairing. G4-forming sequences are associated with immunoglobulin switch regions, promoter sequences, rDNA and telomeric repeats. Ab00389-1.1 was used by Hansel-Hertsch et al. 2016 (PMID: 27618450) in immunofluorescence staining (in comparison to the BG4 anti-G quadruplex antibody, c.f. Ab00174).

**Antibody First Published in:** Henderson et al. Detection of G-quadruplex DNA in mammalian cells. Nucleic Acids 2014; 42(2):860-869 [PMID:24163102](#)

**Note on publication:** Describes the generation of several G4-DNA-specific monoclonal antibodies and how these can be used for nuclear staining.

## Product Form

**Size:** 200 µg Purified antibody.

**Purification:** Protein A affinity purified

**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.