Product datasheet

anti-DNA mouse monoclonal, AC-30-10, liquid, purified

Short overview

Cat. No.	690014
Quantity	1 ml
Concentration	100 µg/ml (100 µg)

Product description

Host	Mouse
Antibody Type	Monoclonal
Isotype	IgM
Clone	AC-30-10
Immunogen	Double- and single-stranded DNA
Formulation	PBS pH 7.4 with 0.09% sodium azide and 0.5% BSA
Conjugate	Unconjugated
Purification	Size exclusion chromatography
Storage	2-8°C
Intended use	Research use only
Application	Dot blot, ICC/IF, IHC
Reactivity	All species

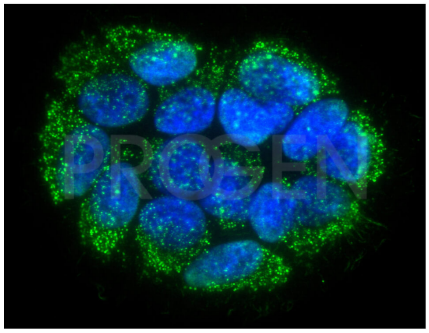
Applications

Dot Blot	Assay dependent (on nitrocellulose membrane, after baking at 70°C)
Immunocytochemistry (ICC)	1:200 (0.5 µg/ml)
Immunohistochemistry (IHC) - frozen	1:10 (10 µg/ml)
Immunohistochemistry (IHC) - paraffin	1:10 (10 µg/ml, microwave treatment recommended)

Background

AC-30-10 stains DNA present in the nuclei and the mitochondria of cells and tissues. It is also a reliable positive control in assays for detection of DNA antibodies, especially for the detection of autoantibodies in autoimmune diseases. Due to the high sensitivity it can also be used for the detection of mycoplasma contamination in cell cultures.Binding characteristics: reacts with all forms of native and denatured DNA; reactive also with lambda DNA and synthetic DNA.Tested cultured cell lines: XLKE-A6 (Xenopus), RVF-SMC, PTK-2, HeLa.

Product images



Immunofluorescence analysis of HeLa cells with anti-DNA antibody. Fixation was performed using 3% paraformaldehyde for 10 min at RT. Cells were blocked with 5% BSA in PBST (PBS + 0.1% Tween 20) for 1 h at RT and permeabilized with 0.3% Triton-X 100 in PBS for 10 min at RT. The primary antibody anti-DNA mouse monoclonal, AC-30-10 (Cat. No. 690014) was diluted in blocking buffer (antibody concentration 0.5 µg/ml) and incubated over-night at 4°C. The secondary antibody goat anti-mouse IgM Alexa488 was also diluted in blocking buffer (antibody concentration 2.5 µg/ml) and incubated for 30 min at 37°C and 30 min at RT. Nuclear DNA was stained with DAPI in blue.

References

Publication	Species	Application
Paffett, M. L. et al. Interactomic analysis reveals a homeostatic role for the HIV restriction factor TRIM5Î± in mitophagy., Cell Rep 39, 110797, (2022).	human	ICC-IF
Tanaka, K. et al. Mammalian BCAS3 and C16orf70 associate with the phagophore assembly site in response to selective and non-selective autophagy., Autophagy 17, 2011-2036, (2021)	human	ICC-IF
Xu, J. et al. Synergistic effects of autophagy/mitophagy inhibitors and magnolol promote apoptosis and antitumor efficacy., Acta Pharm Sin B 11, 3966-3982, (2021).	human	ICC-IF
Piro-MÃ©gy, C. et al. Dominant mutations in mtDNA maintenance gene SSBP1 cause optic atrophy and foveopathy. J.Clin.Invest. 130, 143-156 (2020)	human	ICC
Qin, J. et al. ER-mitochondria contacts promote mtDNA nucleoids active transportation via mitochondrial dynamic tubulation. Nat. Commun. 11, (2020).	monkey	IHC-IF