Datasheet for ABIN6655018

anti-DMPO antibody (Biotin)

2 Images

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Overview

Quantity:	100 µg
Target:	DMPO
Reactivity:	Adenovirus
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	Biotin
Application:	Immunoprecipitation (IP), Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Fluorescence Microscopy (FM)

Product Details

Purpose:	DMPO Antibody
Immunogen:	DMPO Antibody was produced in mice by repeated immunizations with 5,5-dimethyl-2-(8-octanoic acid)-1-pyrrolone-N-oxide conjugated to Ovalbumin.
Clone:	N1664A
Isotype:	IgG
Cross-Reactivity (Details):	DMPO is species independent.
Purification:	Anti-DMPO Antibody was purified by Protein G chromatography.
Sterility:	Sterile filtered

Target Details

Target:	DMPO
Target Type:	Chemical
Background:	Synonyms: 5,5-dimethyl-2-(8-octanoic acid)-1-pyrroline N oxide Background: The formation of free radicals and other highly reactive oxygen species has been implicated in the pathogenesis of many disease states. The ability to identify these species is crucial, and spin trapping has accomplished this goal. DMPO (5,5-dimethyl-1-pyrroline N-oxide) is one of the least toxic to cells and animals, and possesses convenient pharmacokinetics (uptake, distribution, metabolism and excretion) in biological systems. Recent studies have determined that nitric oxide may substantially affect the quantitative determination of DMPO adducts, and therefore extra caution is required when studying generation of these species in the presence of nitric oxide or its radicals. DMPO adducts can be generated with protein and DNA radicals.

Application Details

Application Notes:	Immunoprecipitation_Dilution: User Optimized Immunohistochemistry_Dilution: User Optimized IF_Microscopy_Dilution: User Optimized
Comment:	Anti-DMPO Antibody is tested for use in IP, IF microscopy, IHC and WB. Expect a band approximately ~90kDa corresponding to specific lysates. Specific conditions for reactivity should be optimized by the end user.
Restrictions:	For Research Use only

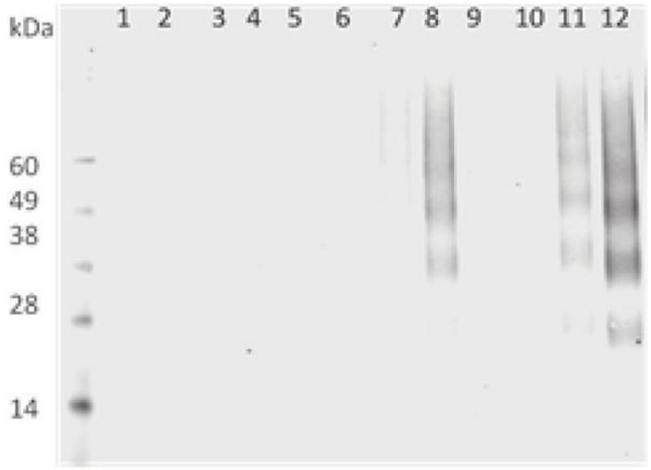
Handling

Format:	Liquid
Buffer:	Buffer: 0.01 M Tris Cl, 0.15 M Sodium Chloride, 0.001 M EDTA, pH 7.4 Stabilizer: 50 % (v/v) Glycerol Preservative: 0.05 % (w/v) Sodium Azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended

Handling

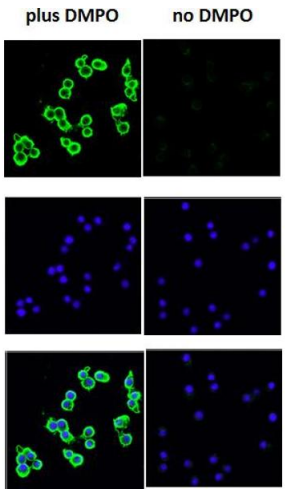
	storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiry Date:	12 months

Images



Western Blotting

Image 1. DMPO Western Blot. Western Blot of Mouse anti-DMPO antibody. Lane 1: 10uM Hb (Hemoglobin). Lane 2: 10uM Hb + 100uM HOCl. Lane 3: 10uM Hb + 500uM HOCl. Lane 4: 10uM Hb + 1000uM HOCl. Lane 5: 10uM Hb + 20mM DMPO. Lane 6: 10uM Hb + 100uM HOCl + 20mM DMPO. Lane 7: 10uM Hb + 500uM HOCl + 20mM DMPO. Lane 8: 10uM Hb + 1000uM HOCl + 20mM DMPO. Lane 9: 10uM Hb + 100mM DMPO. Lane 10: 10uM Hb + 100uM HOCl + 100mM DMPO. Lane 11: 10uM Hb + 500uM HOCl + 100mM DMPO. Lane 12: 10uM Hb + 1000uM HOCl + 100mM DMPO. Load: 35 µg per lane. Primary antibody: DMPO antibody at 1:1000 for ON at 4°C. Secondary antibody:mouse secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C.



Immunofluorescence

Image 2. DMPO Immunofluorescence. Immunofluorescence Microscopy of Mouse anti-DMPO Biotin conjugated antibody. Tissue: mouse macrophage cell lines. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: DMPO antibody at 10 µg/mL for 1 h at RT. Secondary antibody: Fluorescein mouse secondary antibody at 1:10,000 for 45 min at RT. Localization: DMPO is cytoplasmic. Staining: DMPO as green fluorescent signal with DAPI (blue) nuclear counterstain.