

Mouse DMPO Monoclonal Antibody | anti-dmpO antibody

DMPO Antibody: ATTO 594

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA103144	Mouse	Species Independent	Immunoprecipitation, Immunofluorescence, Immunocytochemistry, Western Blot, ELISA

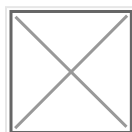
PRODUCT SYNONYMS

DMPO; Monoclonal Antibody; DMPO Antibody: ATTO 594; 5;5-dimethyl-2-(8-octanoic acid)-1-pyrroline N oxide; DMPO nitron adduct; anti-dmpO antibody

PRODUCT SPECIFICATIONS

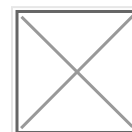
Host	Mouse
Reactivity	Species Independent
Clonality	Monoclonal
Isotype	IgG1
Clone Number	N1664A
Form/Format	Protein G Purified
Concentration	1mg/mL (varies by lot)
Sequence Length	119
Applicable Applications for anti-dmpO antibody	IP (Immunoprecipitation), IF (Immunofluorescence), ICC (Immunocytochemistry), WB (Western Blot), ELISA, Immunospintrapping
Conjugate	ATTO 594
Storage Buffer	TBS pH7.4, 50% glycerol, 0.05% sodium azide
Preparation and Storage	-20 degree C

IMAGES



WB (Western Blot)

Western Blot analysis of Human HL 60 clone 15 eosinophils lysates showing detection of DMPO protein using Mouse Anti-DMPO Monoclonal Antibody, Clone N1664A. Primary Antibody: Mouse Anti-DMPO Monoclonal Antibody at 1:200.



ICC (Immunocytochemistry)

Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-DMPO Monoclonal Antibody, Clone N1664A. Tissue: macrophage cell line (Raw 264.7). Species: Mouse. Primary Antibody: Mouse Anti-DMPO Monoclonal Antibody at 1:100. Secondary Antibody: Alexa Fluor 488 Goat Anti-Mouse (green) at 1:1000. Counterstain: DAPI (blue) nuclear stain.

ADDITIONAL INFORMATION

Related Product Information for anti-dmpO antibody	<p>Background Info: Detects ~90kDa. Recognizes DMPO, DMPO-octanoic acid, DMPO-protein adducts and DMPO-DNA adducts. Does not cross react with non-adducted proteins or DNA.</p> <p>Scientific Background: The formation of free radicals and other highly reactive oxygen species has been implicated in the pathogenesis of many disease states (1). 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 (2-6). 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 (1). DMPO adducts can be generated with protein and DNA radicals (7).</p>
Product Categories/Family for anti-dmpO antibody	Oxidative Stress
References	1. Reszka K.J., et al. (2006) Nitric Oxide 15: 133-141. 2. Ramirez D.C., Gomez-Mejiba S.E., and Mason R.P. (2007) Nat Protoc. 2(3): 512-522. 3. Khan N., et al. (2003) Free Radic. Biol. Med 34:1473- 1481. 4. Haseloff R.F., et al. (1997) FEBS Lett 418:73-75. 5. Schaefer C.F., Janzen E.G., West M.S., Poyer J.L., and Kosanke S.D. (1996) Free Radic. Biol. Med 21:427-436. 6. Anzai K., et al. (2003) Arch. Biochem. Biophys 415:251- 256. 7. Free Radic Biol Med. 2009 April 1; 46(7): 853-865. doi:10.1016/j.freeradbiomed.2008.12.020. 8. Chatterjee S., Ehrenshaft, M., Bhattacharjee,S., Derterding, L.J., Bonini, M.G., Corbett, J., Kadiiska, M.B., Tomer K.B. and Mason, R.P. 2009 Free Radic. Med. and Biol. 46:454-461.

NCBI AND UNIPROT INFORMATION

NCBI GI #	51242284
Molecular Weight	13,207 Da
NCBI Official Full Name	DmpO
UniProt Protein Name	DmpO
UniProt Gene Name	dmpO
UniProt Entry Name	Q68J58_PSEPU

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.