Datasheet for ABIN636762

anti-Dinitrophenol antibody

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Overview

Quantity:	250 µL
Target:	Dinitrophenol (DNP)
Reactivity:	Please inquire
Host:	Goat
Clonality:	Polyclonal
Conjugate:	This Dinitrophenol antibody is un-conjugated
Application:	ELISA, Western Blotting (WB)

Product Details

Immunogen:	Dinitrophenol antibody was raised in goat using dinitrophenol-modified protein as the immunogen.

Target Details

Target:	Dinitrophenol (DNP)
Alternative Name:	DNP (DNP Products)
Target Type:	Chemical
Background:	Tissues are continually exposed to reactive oxygen species (ROS) that are produced in tissues from metabolism processes or the inflammatory response of leukocytes or macrophages. It is estimated that as much as 1 % of consumed oxygen may be converted to ROS, which can cause damage to various cellular components. Proteins are one of the cellular components most vulnerable to oxidative damage by ROS, which results in an increase in protein carbonyl

Target Details

	content. This oxidative modification of proteins can lead to cross-linking, peptide fragmentation, modified residues and the conversion of one amino group to another. If sufficient protein damage accumulates, cell death will occur.

Application Details

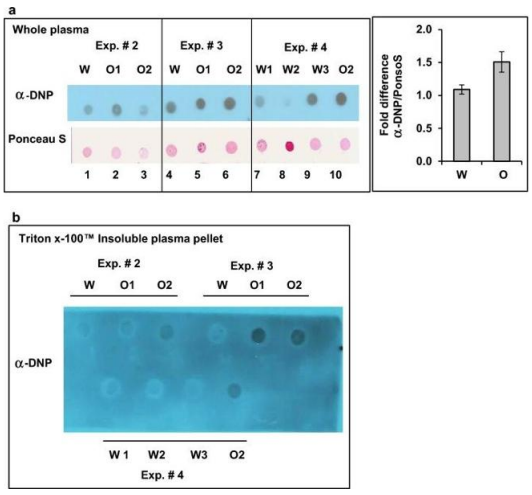
Application Notes:	ELISA: >1:4,000, WB: >1:2,000 Optimal conditions should be determined by the investigator.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	Lot specific
Buffer:	Supplied as liquid whole serum without preservative
Handling Advice:	Avoid repeated freeze/thaw cycles.
Storage:	4 °C/-20 °C
Storage Comment:	Store at 4 °C for short term storage. Aliquot and store at -20 °C for long term storage.

Publications

Product cited in:	Ehrenreich, Nau, Dembowski, Hasselblatt, Barth, Hahn, Schilling, Sirén A-L, Brück: "Endothelin b receptor deficiency is associated with an increased rate of neuronal apoptosis in the dentate gyrus." in: **Neuroscience**, Vol. 95, Issue 4, pp. 993-1001, (2000) (PubMed).



Dot Blot

Image 1. Chronic oxycodone treatment increases protein carbonyl content in rat plasma. a Dot-blot analysis of carbonylated proteins in rat plasma. Left panel, equal amount of total protein from plasma of rats treated with oxycodone (O1, O2) or water (W) were derivatized with DNPH, spotted on NC membrane and probed with anti-DNP antibodies (ABIN636762). The same membrane was later stained with Ponceau S to detect total protein in each spot. Each plasma sample corresponds to the same animal from which cortex samples was obtained (Fig. 1a, Exp. #). The corresponding experiment is indicated above each set of samples. Right graph, quantitative analysis of dot-blot images shown on left. DNP signal was normalized to Ponceau S signal in corresponding sample and then oxycodone value was normalized to water value in the same experiment. Graph represents mean value of DNP to Ponceau S ratio normalized to water samples set as one (± SEM; n = 3 (three sets of experiments that analyzed samples from 9 water and 13 oxycodone treated rats; p = 0.1). b Dot-blot analysis of Triton™ X-100 insoluble carbonylated proteins in rat plasma. Equal volume of plasma samples from rats treated with water (W) or oxycodone (O) corresponding to samples presented in a was centrifuged at 20,000×g for 30 min. The pellets were resuspended in buffer containing 1% Triton™ X-100 and centrifuged again. Resulting pellets were dissolved in buffer, derivatized with DNPH, spotted on NC membrane and probed with anti-DNP antibodies (ABIN636762). Source: PMC6977314