

## **References for Products 15259 and 15260**

1. Marino D, Gonzalez EM, Frendo P, Puppo A, Arrese-Igor C. (2006) NADPH recycling systems in oxidative stressed pea nodules: a key role for the NADP(+)-dependent isocitrate dehydrogenase. *Planta*.
2. Diaz-Flores M, Ibanez-Hernandez MA, Galvan RE, Gutierrez M, Duran-Reyes G, Medina-Navarro R, Pascoe-Lira D, Ortega-Camarillo C, Vilar-Rojas C, Cruz M, Baiza-Gutman LA. (2006) Glucose-6-phosphate dehydrogenase activity and NADPH/NADP+ ratio in liver and pancreas are dependent on the severity of hyperglycemia in rat. *Life Sci*, 78, 2601.
3. Pedersen A, Johansson T, Rydstrom J, Goran Karlsson B. (2005) Titration of E. coli transhydrogenase domain III with bound NADP+ or NADPH studied by NMR reveals no pH-dependent conformational change in the physiological pH range. *Biochim Biophys Acta*, 1707, 254.
4. Bhatt AN, Shukla N, Aliverti A, Zanetti G, Bhakuni V. (2005) Modulation of cooperativity in Mycobacterium tuberculosis NADPH-ferredoxin reductase: cation- and pH-induced alterations in native conformation and destabilization of the NADP+-binding domain. *Protein Sci*, 14, 980.
5. Barron JT, Sasse MF, Nair A. (2004) Effect of angiotensin II on energetics, glucose metabolism and cytosolic NADH/NAD and NADPH/NADP redox in vascular smooth muscle. *Mol Cell Biochem*, 262, 91.
6. Gaetani GF, Ferraris AM, Sanna P, Kirkman HN. (2005) A novel NADPH:(bound) NADP+ reductase and NADH:(bound) NADP+ transhydrogenase function in bovine liver catalase. *Biochem J*, 385, 763.
7. Ziegler GA, Schulz GE. (2000) Crystal structures of adrenodoxin reductase in complex with NADP+ and NADPH suggesting a mechanism for the electron transfer of an enzyme family. *Biochemistry*, 39, 10986.
8. Peake SJ, Venning JD, Cotton NP, Jackson JB. (1999) Evidence for the stabilization of NADPH relative to NADP(+) on the dIII components of proton-translocating transhydrogenases from Homo sapiens and from Rhodospirillum rubrum by measurement of tryptophan fluorescence. *Biochim Biophys Acta*, 1413, 81.
9. Minard KI, Jennings GT, Loftus TM, Xuan D, McAlister-Henn L. (1998) Sources of NADPH and expression of mammalian NADP+-specific isocitrate dehydrogenases in Saccharomyces cerevisiae. *J Biol Chem*, 273, 31486.
10. Ruiz C, Alegria A, Barbera R, Farre R, Lagarda MJ. (1997) Determination of plasma lipid hydroperoxides by an NADPH/NADP+ coupled enzyme reaction system. Evaluation of a method. *Eur J Clin Chem Clin Biochem*, 35, 893.
11. Norman HA, Pillai P. (1996) High-performance liquid chromatographic resolution of NADP+ after induction of fluorescence and its application to assay for an NADPH-dependent enzyme: application to the determination of glutathione reductase activity in plant leaf extracts. *Anal Biochem*, 237, 30.
12. Kobayashi K, Miura S, Miki M, Ichikawa Y, Tagawa S. (1995) Interaction of NADPH-adrenodoxin reductase with NADP+ as studied by pulse radiolysis. *Biochemistry*, 34, 12932.
13. Gerothanassis IP, Barrie PJ, Birdsall B, Feeney J. (1994) 31P-NMR studies of NADPH, NADP+ and the complex of NADPH and methotrexate with Lactobacillus casei dihydrofolate reductase in the solid state. *Eur J Biochem*, 226, 211.
14. Isas JM, Burgess BK. (1994) Purification and characterization of a NADP+/NADPH-specific flavoprotein that is overexpressed in Fdl- strains of Azotobacter vinelandii. *J Biol Chem*, 269, 19404.
15. Ehrig T, Bohren KM, Prendergast FG, Gabbay KH. (1994) Mechanism of aldose reductase inhibition: binding of NADP+/NADPH and alrestatin-like inhibitors. *Biochemistry*, 33, 7157.

16. Miura S, Ichikawa Y. (1994) Interaction of NADPH-adrenoferreredoxin reductase with NADP<sup>+</sup> and adrenoferreredoxin. Equilibrium and dynamic properties investigated by proton nuclear magnetic resonance. *J Biol Chem*, 269, 8001.
17. Lennon AM. (1992) Purification and characterization of rat brain cytosolic 3,5,3'-triiodo-L-thyronine-binding protein. Evidence for binding activity dependent on NADPH, NADP and thioredoxin. *Eur J Biochem*, 210, 79.
18. Foyer CH, Lelandais M, Harbinson J. (1992) Control of the Quantum Efficiencies of Photosystems I and II, Electron Flow, and Enzyme Activation following Dark-to-Light Transitions in Pea Leaves: Relationship between NADP/NADPH Ratios and NADP-Malate Dehydrogenase Activation State. *Plant Physiol*, 99, 979.
19. Napoli JL, Posch KC, Burns RD. (1992) Microsomal retinal synthesis: retinol vs. holo-CRBP as substrate and evaluation of NADP, NAD and NADPH as cofactors. *Biochim Biophys Acta*, 1120, 183.
20. Yasmineh WG, Chung MY, Caspers JI. (1992) Determination of serum catalase activity on a centrifugal analyzer by an NADP/NADPH coupled enzyme reaction system. *Clin Biochem*, 25, 21.
21. Ragg E, Scaglioni L, Mondelli R, Carelli I, Casini A, Tortorella S. (1991) <sup>1</sup>H-, <sup>13</sup>C-, <sup>31</sup>P-NMR studies and conformational analysis of NADP<sup>+</sup>, NADPH coenzymes and of dimers from electrochemical reduction of NADP<sup>+</sup>. *Biochim Biophys Acta*, 1076, 49.
22. Sohal RS, Arnold L, Orr WC. (1990) Effect of age on superoxide dismutase, catalase, glutathione reductase, inorganic peroxides, TBA-reactive material, GSH/GSSG, NADPH/NADP<sup>+</sup> and NADH/NAD<sup>+</sup> in *Drosophila melanogaster*. *Mech Ageing Dev*, 56, 223.
23. Bonants PJ, Muller F, Vervoort J, Edmondson DE. (1990) A <sup>31</sup>P-nuclear-magnetic-resonance study of NADPH-cytochrome-P-450 reductase and of the *Azotobacter flavodoxin/ferredoxin-NADP<sup>+</sup> reductase complex*. *Eur J Biochem*, 190, 531.
24. Laporte F, Doussiere J, Vignais PV. (1990) Characterization of multiple active forms of the NADPH dehydrogenase component of the oxidase complex from rabbit peritoneal neutrophils by photolabeling with an arylazido derivative of NADP<sup>+</sup>. *Biochem Biophys Res Commun*, 168, 78.
25. Muller K, Linder D, Lumper L. (1990) The cosubstrate NADP(H) protects lysine 601 in the porcine NADPH-cytochrome P-450 reductase against pyridoxylation. *FEBS Lett*, 260, 289.
26. Yamaguchi M, Hatefi Y. (1989) Mitochondrial nicotinamide nucleotide transhydrogenase: NADPH binding increases and NADP binding decreases the acidity and susceptibility to modification of cysteine-893. *Biochemistry*, 28, 6050.
27. Scherer S, Alpes I, Sadowski H, Boger P. (1988) Ferredoxin-NADP<sup>+</sup> oxidoreductase is the respiratory NADPH dehydrogenase of the cyanobacterium *Anabaena variabilis*. *Arch Biochem Biophys*, 267, 228.
28. Saha A, Colman RF. (1988) Modification of NAD-dependent isocitrate dehydrogenase by the 2',3'-dialdehyde derivatives of NAD, NADH, NADP, and NADPH. *Arch Biochem Biophys*, 264, 665.
29. Levy LM, Betts GF. (1988) Interaction of NADPH and triazine dyes with ferredoxin-NADP<sup>+</sup> oxidoreductase. *Biochim Biophys Acta*, 955, 236.
30. Chenas NK, Martsinkivichene IA, Kulis I, Usanov SA. (1988) [Inhibition of adrenodoxin reductase by NADP<sup>+</sup> and NADPH]. *Ukr Biokhim Zh*, 60, 26.
31. Verspohl EJ, Kaiser P, Wahl M, Ammon HP. (1988) Decreased insulin secretory response of pancreatic islets during culture in the presence of low glucose is associated with diminished <sup>45</sup>Ca<sup>2+</sup> net uptake, NADPH/NADP<sup>+</sup> and GSH/GSSG ratios. *Life Sci*, 43, 209.
32. Fabregat I, Revilla E, Machado A. (1987) Short-term control of the pentose phosphate cycle by insulin could be modulated by the NADPH/NADP ratio in rat adipocytes and hepatocytes. *Biochem Biophys Res Commun*, 146, 920.
33. Hosler JP, Yocum CF. (1987) Regulation of Cyclic Photophosphorylation during Ferredoxin-Mediated Electron Transport : Effect of DCMU and the NADPH/NADP Ratio. *Plant Physiol*, 83, 965.

34. Hedekov CJ, Capito K, Thams P. (1987) Cytosolic ratios of free [NADPH]/[NADP+] and [NADH]/[NAD+] in mouse pancreatic islets, and nutrient-induced insulin secretion. *Biochem J*, 241, 161.
35. Leanz GF, Hammes GG. (1986) Kinetic and nuclear magnetic resonance study of the interaction of NADP+ and NADPH with chicken liver fatty acid synthase. *Biochemistry*, 25, 5617.
36. Rebeille F, Hatch MD. (1986) Regulation of NADP-malate dehydrogenase in C4 plants: relationship among enzyme activity, NADPH to NADP ratios, and thioredoxin redox states in intact maize mesophyll chloroplasts. *Arch Biochem Biophys*, 249, 171.
37. Rebeille F, Hatch MD. (1986) Regulation of NADP-malate dehydrogenase in C4 plants: effect of varying NADPH to NADP ratios and thioredoxin redox state on enzyme activity in reconstituted systems. *Arch Biochem Biophys*, 249, 164.
38. Kosenko EA, Kaminskii lu G. (1985) [NADP+/NADPH ratio in the rat liver in chronic alcohol consumption and withdrawal]. *Vopr Med Khim*, 31, 30.
39. Lee SM, Schade SZ, Doughty CC. (1985) Aldose reductase, NADPH and NADP+ in normal, galactose-fed and diabetic rat lens. *Biochim Biophys Acta*, 841, 247.
40. Virion A, Michot JL, Deme D, Pommier J. (1985) NADPH oxidation catalyzed by the peroxidase/H<sub>2</sub>O<sub>2</sub> system. Iodide-mediated oxidation of NADPH to iodinated NADP. *Eur J Biochem*, 148, 239.
41. Kosenko EA, Kaminsky YG. (1985) A comparison between effects of chronic ethanol consumption, ethanol withdrawal and fasting in ethanol-fed rats on the free cytosolic NADP+/NADPH ratio and NADPH-regenerating enzyme activities in the liver. *Int J Biochem*, 17, 895.
42. Fabregat I, Vitorica J, Satrustegui J, Machado A. (1985) The pentose phosphate cycle is regulated by NADPH/NADP ratio in rat liver. *Arch Biochem Biophys*, 236, 110.