



Anti-Nox3 (NADPH oxidase 3) Polyclonal Antibody

Category: Polyclonal Antibody

Catalog #: AB2D024

Antigen Synonym: MOX2

Species Reactivity: Mouse

Immunogen/Specificity:

Polyclonal antibody produced in rabbits immunizing with a synthetic peptide corresponding to C-terminal residues of mouse Nox3 (NADPH oxidase 3)

Description: NADPH oxidase which constitutively produces superoxide upon formation of a complex with CYBA/p22phox. Nox3 (NADPH oxidase 3) plays a role in the biogenesis of otoconia/otolith, which are crystalline structures of the inner ear involved in the perception of gravity. Nox3 (NADPH oxidase 3) is activated by the ototoxic drug cisplatin and activated by NOXO1. Nox3 is also cooperatively activated by NCF1 and NCF2 or NOXA1 in a phorbol 12-myristate 13-acetate (PMA)-dependent manner. Nox3 is inhibited by diphenyleneiodonium chloride. Nox3 interacts with and stabilizes CYBA/p22phox. Nox3 is specifically expressed in inner ear by the spiral glanglion neurons, the vestibular system and the sensory epithelial cell layer of the saccule.

Reference:

Cheret, C., et al, J. Neurosci. 28 (46), 12039-12051 (2008)
Zhao, X., et al, Neuroscience 153 (1), 289-299 (2008)
Nakano, Y., et al, Biochem. J. 403 (1), 97-108 (2007)
Hoffman, L.F., et al, Hear. Res. 222 (1-2), 35-42 (2006)
Li, J., et al, Mol. Biol. Cell 17 (9), 3978-3988 (2006)
Harrod, C.G. and Baker, J.F., Brain Res. 972 (1-2), 75-83 (2003)
Fuller, P.M., et al, Proc. Natl. Acad. Sci. U.S.A. 99 (24), 15723-15728 (2002)
Lyon, M.F., et al, Genetics 155 (2), 793-801 (2000)
Jones, S.M., et al, Hear. Res. 135 (1-2), 56-60 (1999)
Bergstrom, R.A., et al, Genetics 150 (2), 815-822 (1998)