

Goat Anti-NOXO1 Antibody
Peptide-affinity purified goat antibody
Catalog # AF1741a**Specification**

Goat Anti-NOXO1 Antibody - Product Information

Application	IHC, E
Primary Accession	Q8NFA2
Other Accession	NP_751907 , 124056
Reactivity	Human
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	41253

Goat Anti-NOXO1 Antibody - Additional Information**Gene ID** 124056**Other Names**

NADPH oxidase organizer 1, NADPH oxidase regulatory protein, Nox organizer 1, Nox-organizing protein 1, SH3 and PX domain-containing protein 5, NOXO1, P41NOX, SH3PXD5

Dilution

IHC~~1:100~500

E~~N/A

Format

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-NOXO1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-NOXO1 Antibody - Protein Information**Name** NOXO1**Synonyms** P41NOX, SH3PXD5**Function**

Constitutively potentiates the superoxide-generating activity of NOX1 and NOX3 and is required for the biogenesis of otoconia/otolith, which are crystalline structures of the inner ear involved in the perception of gravity. Isoform 3 is more potent than isoform 1 in activating NOX3. Together with NOXA1, may also substitute to NCF1/p47phox and NCF2/p67phox in supporting the phagocyte NOX2/gp91phox superoxide-generating activity.

Cellular Location

[Isoform 3]: Cell membrane; Peripheral membrane protein; Cytoplasmic side. Note=Isoform 3 associates with the plasma membrane in a lipid-dependent manner (PubMed:12716910)

Tissue Location

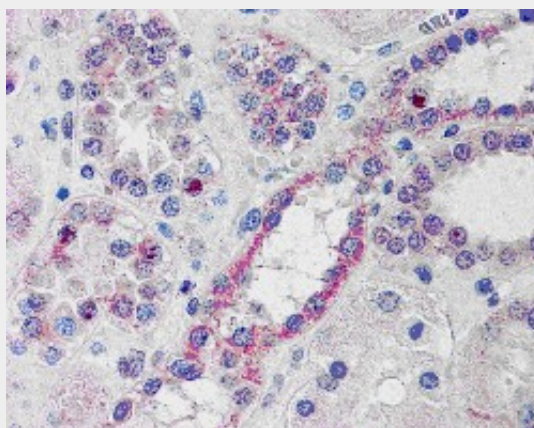
Expressed in testis, small and large intestines, liver, kidney and pancreas. Isoform 3 is mainly expressed in colon Isoform 1 is preferentially expressed in testis

Goat Anti-NOXO1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Goat Anti-NOXO1 Antibody - Images



AF1741a (10 µg/ml) staining of paraffin embedded Human Kidney. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

Goat Anti-NOXO1 Antibody - Background

NADPH oxidases (NOXs) catalyze the transfer of electrons from NADPH to molecular oxygen to generate reactive oxygen species (ROS). NOX organizers, such as NOXO1, target NOX activators (see NOXA1; MIM 611255) to NOX and also target NOX to different subcellular compartments (Opitz et al., 2007 [PubMed 17189823]).

Goat Anti-NOXO1 Antibody - References

Regulation of NOXO1 activity through reversible interactions with p22 and NOXA1. Dutta S, et al. PLoS One, 2010 May 4. PMID 20454568.

The 'A's and 'O's of NADPH oxidase regulation: a commentary on Subcellular localization and function of alternatively spliced Noxo1 isoforms. Opitz N, et al. Free Radic Biol Med, 2007 Jan 15. PMID 17189823.

Interaction between the SH3 domains and C-terminal proline-rich region in NADPH oxidase organizer 1 (Noxo1). Yamamoto A, et al. Biochem Biophys Res Commun, 2007 Jan 12. PMID 17126813.

Expression and function of Noxo1gamma, an alternative splicing form of the NADPH oxidase organizer 1. Takeya R, et al. FEBS J, 2006 Aug. PMID 16911517.

Nox1-dependent reactive oxygen generation is regulated by Rac1. Cheng G, et al. J Biol Chem, 2006 Jun 30. PMID 16636067.