Datasheet for ABIN7601776

anti-SMOX antibody (AA 45-454)

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Overview

Quantity:	100 µg
Target:	SMOX
Binding Specificity:	AA 45-454
Reactivity:	Human, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This SMOX antibody is un-conjugated
Application:	ELISA, Western Blotting (WB), Immunohistochemistry (IHC), Immunocytochemistry (ICC), Immunofluorescence (IF), Flow Cytometry (FACS)

Product Details

Purpose:	Anti-SMOX Antibody Picoband®
Immunogen:	E.coli-derived human SMOX recombinant protein (Position: E45-Q454).
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins.
Characteristics:	Anti-SMOX Antibody Picoband® (ABIN7601776). Tested in ELISA, Flow Cytometry, IF, IHC, ICC, WB applications. This antibody reacts with Human, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Purification:	Immunogen affinity purified.

Target Details

Target:	SMOX
Alternative Name:	SMOX (SMOX Products)
Background:	Synonyms: Spermine oxidase, Polyamine oxidase 1, PAO-1, PAOh1, Smox, Smo Tissue Specificity: Widely expressed. Isoform 1 and isoform 2 are expressed at higher level in brain and skeletal muscle. Isoform 7 is found in brain and spleen, isoform 10 is widely expressed but found at lower level in heart, kidney, liver and lung. Background: Spermine oxidase is an enzyme that in humans is encoded by the SMOX gene. Polyamines are ubiquitous polycationic alkylamines which include spermine, spermidine, putrescine, and agmatine. These molecules participate in a broad range of cellular functions which include cell cycle modulation, scavenging reactive oxygen species, and the control of gene expression. These molecules also play important roles in neurotransmission through their regulation of cell-surface receptor activity, involvement in intracellular signalling pathways, and their putative roles as neurotransmitters. This gene encodes an FAD-containing enzyme that catalyzes the oxidation of spermine to spermadine and secondarily produces hydrogen peroxide. Multiple transcript variants encoding different isoenzymes have been identified for this gene, some of which have failed to demonstrate significant oxidase activity on natural polyamine substrates. The characterized isoenzymes have distinctive biochemical characteristics and substrate specificities, suggesting the existence of additional levels of complexity in polyamine catabolism.
Molecular Weight:	69 kDa
Gene ID:	54498

Application Details

Application Notes:	Western blot, 0.25-0.5 µg/mL, Human, Rat Immunohistochemistry(Paraffin-embedded Section), 2-5 µg/mL, Human Immunocytochemistry/Immunofluorescence, 5 µg/mL, Human Flow Cytometry (Fixed), 1-3 µg/1x10^6 cells, Human ELISA, 0.1-0.5 µg/mL, - 1. Hartz, P. A. Personal Communication. Baltimore, Md. 6/20/2014. 2. Murray-Stewart, T., Wang, Y., Devereux, W., Casero, R. A., Jr. Cloning and characterization of multiple human polyamine oxidase splice variants that code for isoenzymes with different biochemical characteristics. Biochem. J. 368: 673-677, 2002. 3. Pledgie, A., Huang, Y., Hacker, A., Zhang, Z., Woster, P. M., Davidson, N. E., Casero, R. A., Jr. Spermine oxidase SMO(PAOh1), not N(1)-acetylpolyamine oxidase PAO, is the primary source of cytotoxic H2O2 in polyamine analogue-treated human

Application Details

	breast cancer cell lines. J. Biol. Chem. 280: 39843-39851, 2005.
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Adding 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
Storage:	4 °C,-20 °C
Storage Comment:	At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.