

ARG45412 anti-SMOX antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes SMOX
Tested Reactivity	Hu, Rat
Tested Application	FACS, ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	SMOX
Species	Human
Immunogen	Recombinant protein containing to human SMOX.
Conjugation	Un-conjugated
Alternate Names	SMOX; Spermine Oxidase; PAOh1; SMO; C20orf16; PAO; Polyamine Oxidase 1; DJ779E11.1; FLJ20746; MGC1010; PAO-1; Putative Cyclin G1 Interacting Protein; Chromosome 20 Open Reading Frame 16; Flavin-Containing Spermine Oxidase; Flavin Containing Amine Oxidase; EC 1.5.3.16; PAO1; PAOH

Application Instructions

Application table	Application	Dilution
	FACS	1 - 3 µg/10 ⁶ cells
	ICC/IF	5 µg/ml
	IHC-P	2-5 µg/ml
	WB	0.25-0.5 µg/ml
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	69 kDa	

Properties

Form	Powder
Purification	Affinity purified
Buffer	0.2% Na ₂ HPO ₄ , 0.9% NaCl and 4% Trehalose.
Stabilizer	4% Trehalose
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

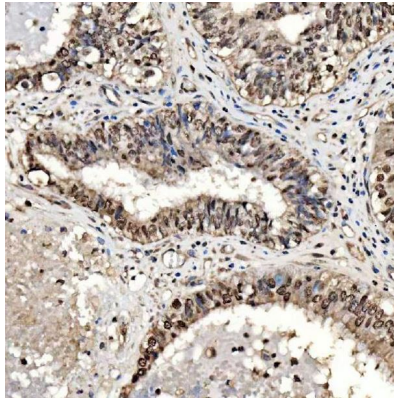
before use.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

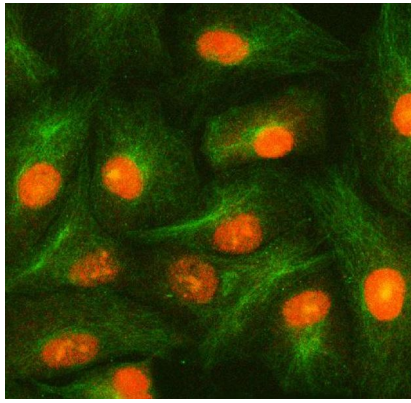
Gene Symbol	SMOX
Gene Full Name	Spermine Oxidase
Background	<p>Polyamines are ubiquitous polycationic alkylamines which include spermine, spermidine, putrescine, and agmatine. These molecules participate in a broad range of cellular functions which include cell cycle modulation, scavenging reactive oxygen 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. [provided by RefSeq, Jul 2012]</p>
Function	<p>Flavoenzyme which catalyzes the oxidation of spermine to spermidine. Can also use N1-acetylspermine and spermidine as substrates, with different affinity depending on the isoform (isozyme) and on the experimental conditions. Plays an important role in the regulation of polyamine intracellular concentration and has the potential to act as a determinant of cellular sensitivity to the antitumor polyamine analogs. May contribute to beta-alanine production via aldehyde dehydrogenase conversion of 3-amino-propanal. [UniProt]</p>
Calculated Mw	62 kDa
Cellular Localization	Cytoplasm; Nucleus. [UniProt]

Images



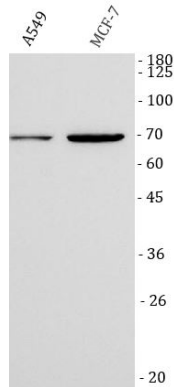
ARG45412 anti-SMOX antibody IHC-P image

Immunohistochemistry: Human endometrioid adenocarcinoma stained with ARG45412 anti-SMOX antibody at 2 µg/ml dilution.



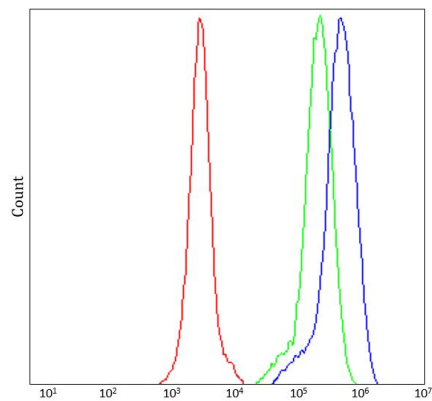
ARG45412 anti-SMOX antibody ICC/IF image

Immunofluorescence: A549 stained with ARG45412 anti-SMOX antibody at 5 µg/ml dilution.



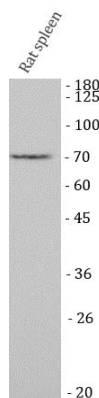
ARG45412 anti-SMOX antibody WB image

Western blot: A549 and MCF-7 stained with ARG45412 anti-SMOX antibody at 0.5 µg/ml dilution.



ARG45412 anti-SMOX antibody FACS image

Flow Cytometry: HL-60 stained with ARG45412 anti-SMOX antibody at 1 µg/10⁶ cells dilution.



ARG45412 anti-SMOX antibody WB image

Western blot: Rat spleen stained with ARG45412 anti-SMOX antibody at 0.5 µg/ml dilution.