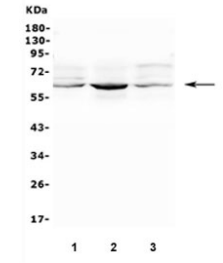
SMOX Antibody / Spermine oxidase / PAO-1 (RQ5536)

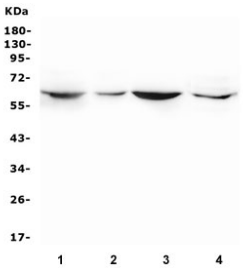
Catalog No.	Formulation	Size
RQ5536	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	Q99K82
Applications	Western Blot : 0.25-0.5ug/ml Direct ELISA : 0.1-0.5ug/ml
Limitations	This SMOX antibody is available for research use only.



Western blot testing of human 1) A549, 2) PC-3 and 3) U-2 OS cell lysate with SMOX antibody. Predicted molecular weight ~62 kDa.



Western blot testing of 1) rat brain, 2) rat heart, 3) mouse brain and 4) mouse NIH3T3 cell lysate with SMOX antibody. Predicted molecular weight ~62 kDa.

Description

Spermine oxidase is an enzyme that in humans is encoded by the SMOX gene. It is mapped to 2; 2 F1. 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.

Application Notes

Optimal dilution of the SMOX antibody should be determined by the researcher.

Immunogen

A mouse recombinant protein (amino acids A40-P555) was used as the immunogen for the SMOX antibody.

Storage

After reconstitution, the SMOX antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.