

Basic Information

Product Name	Anti-eNOS/NOS3 Antibody		
Gene Name	NOS3		
Source	Rabbit		
Clonality	Polyclonal		
Isotype	IgG		
Species Reactivity	human		
Tested Application	WB, ICC/IF, FCM, ELISA		
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.		
Immunogen	E.coli-derived human eNOS/NOS3 recombinant protein (Position: P34-Q1153).		
Concentration	500 ug/ml		
Purification	Immunogen affinity purified.		
Observed MW	133 kDa		
Dilution Ratios	Western blot (WB):	1:500-2000	
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-400	
	Flow Cytometry (Fixed):	1:50-200	
	Enzyme linked immunosorbent assay (ELISA):	1:100-1000	

Storage

12 months from date of receipt, -20°C as supplied.

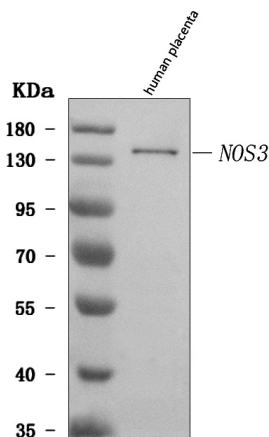
Background Information

NOS3(Nitric Oxide Synthase 3), also called eNOS, a nitric oxide synthase that generates NO in blood vessels and is involved with regulating vascular tone by inhibiting smooth muscle contraction and platelet aggregation. The NOS3 gene is mapped on 7q36.1. Variations in this gene are associated with susceptibility to coronary spasm. ?Fulton et al.?(1999) concluded the eNOS is an AKT substrate linking signal transduction by AKT to the release of the gaseous second messenger nitric oxide. ?AKT mediates the activation of eNOS, leading to increased nitric oxide production. Inhibition of the PI3K AKT pathway or mutation of the AKT site on eNOS protein at serine-1177 attenuated the serine phosphorylation and prevented the activation of eNOS. RT-PCR analysis showed that expression of NOS3 in human umbilical vein endothelial cells (HUVECs) and human aortic vascular smooth muscle cells (HAOVSMCs) was inversely proportional to that of NOS3AS.

Reference

Anti-eNOS/NOS3 Antibody被引用在2文献中。

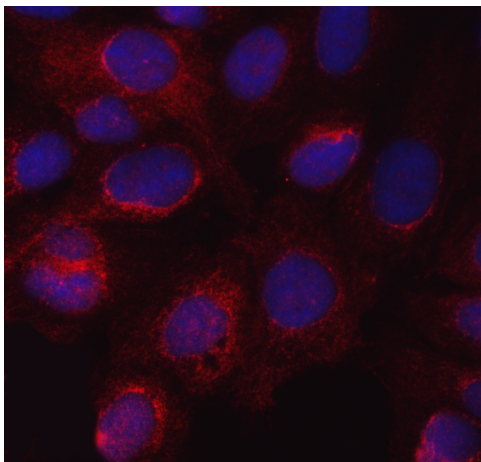
Selected Validation Data



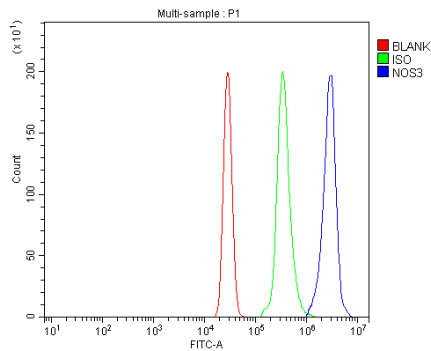
Western blot analysis of anti-eNOS/NOS3 antibody (A01604-3). The sample well of each lane was loaded with 30ug of sample under reducing conditions.

Lane 1: human placenta tissue lysates.

Use rabbit anti-eNOS/NOS3 1:1000, probed with a goat anti-rabbit IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog#EK1002). A specific band was detected for eNOS/NOS3 at approximately 140KD. The expected band size for eNOS/NOS3 is at 133KD.



IF analysis of eNOS/NOS3 using anti-eNOS/NOS3 antibody (A01604-3). eNOS/NOS3 was detected in an immunocytochemical section of U2OS cells. The section was incubated with rabbit anti-eNOS/NOS3 Antibody (A01604-3) at a dilution of 1:100. DyLight594-conjugated Anti-rabbit IgG Secondary Antibody (red) (Catalog#BA1142) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).



Flow Cytometry analysis of U937 cells using anti-eNOS/NOS3 antibody (A01604-3).

Overlay histogram showing U937 cells stained with A01604-3 (Blue line).

To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-eNOS/NOS3 Antibody (A01604-3) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.