

Rabbit SOD3/Ec Sod Polyclonal Antibody | anti-SOD3 antibody

Anti-SOD3/Ec Sod Picoband antibody

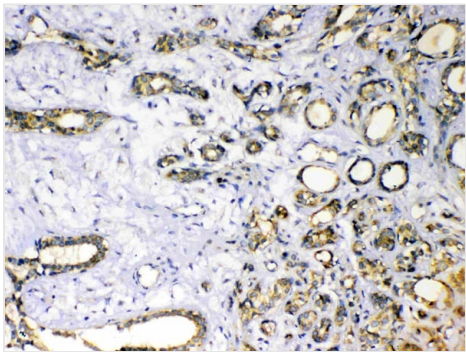
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA124668	Rabbit	Human No cross reactivity with other proteins.	Immunohistochemistry

PRODUCT SYNONYMS

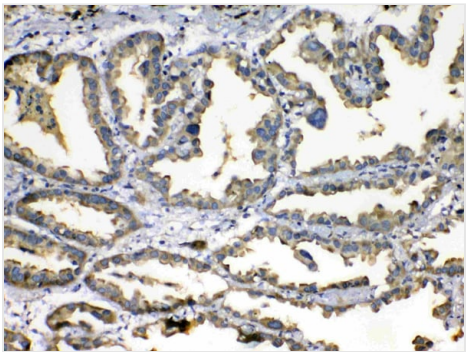
SOD3/Ec Sod; Polyclonal Antibody; Anti-SOD3/Ec Sod Picoband antibody; Extracellular superoxide dismutase [Cu-Zn]; EC-SOD; 1.15.1.1; SOD3; anti-SOD3 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human No cross reactivity with other proteins.
Clonality	Polyclonal
Form/Format	Lyophilized
Sequence Length	240
Applicable Applications for anti-SOD3 antibody	IHC (Immunohistochemistry)
Immunogen	A synthetic peptide corresponding to a sequence of human SOD3 (WTGEDSAEPNSDSA EWIRDMYAKVTEIWQEVMQRRDDD).
Subcellular Localization	Secreted, extracellular space. 99% of EC-SOD is anchored to heparan sulfate proteoglycans in the tissue interstitium, and 1% is located in the vasculature in equilibrium between the plasma and the endothelium.
Tissue Specificity	Expressed in blood vessels, heart, lung, kidney and placenta. Major SOD isoenzyme in extracellular fluids such as plasma, lymph and synovial fluid.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Contents	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



IHC (Immunohistochemistry)
Figure 2. IHC analysis of SOD3 using anti-SOD3 antibody (AAA124668).SOD3 was detected in paraffin-embedded section of human mammary cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-SOD3 Antibody (AAA124668) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



IHC (Immunohistochemistry)
Figure 1. IHC analysis of SOD3 using anti-SOD3 antibody (AAA124668).SOD3 was detected in paraffin-embedded section of human lung cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-SOD3 Antibody (AAA124668) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

ADDITIONAL INFORMATION

Related Product Information for anti-SOD3 antibody	Description: SOD3 (SUPEROXIDE DISMUTASE 3), also called SUPEROXIDE DISMUTASE, EXTRACELLULAR, EC-SOD, and Cu-Zn, is an enzyme that in humans is encoded by the SOD3 gene. This gene encodes a member of the superoxide dismutase (SOD) protein family. SODs are antioxidant enzymes that catalyze the dismutation of two superoxide radicals into hydrogen peroxide and oxygen. Hendrickson et al. (1990) mapped the SOD3 gene to 4pter-q21 by a study of somatic cell hybrids. Stern et al. (2003) narrowed the assignment to 4p15.3-p15.1 by somatic cell and radiation hybrid analysis, linkage mapping, and FISH. The product of this gene is thought to protect the brain, lungs, and other tissues from oxidative stress. The protein is secreted into the extracellular space and forms a glycosylated homotetramer that is anchored to the extracellular matrix (ECM) and cell surfaces through an interaction with heparan sulfate proteoglycan and collagen. A fraction of the protein is cleaved near the C-terminus before secretion to generate circulating tetramers that do not interact with the ECM. Protein Function: Protect the extracellular space from toxic effect of reactive oxygen intermediates by converting superoxide radicals into hydrogen peroxide and oxygen.
Product Categories/Family for anti-SOD3 antibody	Cell Biology; Other Antibodies; Oxidative Atrress; Cancer; Cancer Metabolism; Response to Hypoxia; Cellular Metabolic Process; Metabolism; Pathways and Processes; Metabolism Processes; Redox Metabolism; Antioxidants; Types of Disease

NCBI AND UNIPROT INFORMATION

NCBI GI #	118582275
NCBI GeneID	6649
NCBI Accession #	NP_003093.2
NCBI GenBank Nucleotide #	NP_003093.2
UniProt Accession #	P08294; Q5U781; Q6FHA2
Molecular Weight	25,851 Da
NCBI Official Full Name	extracellular superoxide dismutase
NCBI Official Synonym Full Names	superoxide dismutase 3
NCBI Official Symbol	SOD3
NCBI Official Synonym Symbols	EC-SOD
NCBI Protein Information	extracellular superoxide dismutase [Cu-Zn]

UniProt Protein Name	Extracellular superoxide dismutase [Cu-Zn]
UniProt Gene Name	SOD3
UniProt Synonym Gene Names	EC-SOD

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/sod3-ec-sod-antibody-immunohistochemistry-elisa/124668>