


Product datasheet

Anti-Superoxide Dismutase 1 antibody [2F5] ab115750

2 Images

Overview

Product name	Anti-Superoxide Dismutase 1 antibody [2F5]
Description	Mouse monoclonal [2F5] to Superoxide Dismutase 1
Host species	Mouse
Specificity	ab115750 does not cross react with immunoglobulins but does react weakly with Mn SOD
Tested applications	Suitable for: IHC-P
Species reactivity	Reacts with: Human Predicted to work with: Cow 
Immunogen	Tissue, cells or virus corresponding to Cow Superoxide Dismutase 1. Superoxide dismutase enzyme prepared from bovine erythrocytes
Positive control	Human Kidney and Human Liver tissues
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C or -80°C. Avoid freeze / thaw cycle. Store undiluted.
Storage buffer	Preservative: 0.1% Sodium azide Constituents: 99% PBS, 0.1% BSA
Purity	Protein G purified
Clonality	Monoclonal
Clone number	2F5
Isotype	IgG1

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab115750 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		Use a concentration of 15 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Target

Function

Destroys radicals which are normally produced within the cells and which are toxic to biological systems.

Involvement in disease

Defects in SOD1 are the cause of amyotrophic lateral sclerosis type 1 (ALS1) [MIM:105400]. ALS1 is a familial form of amyotrophic lateral sclerosis, a neurodegenerative disorder affecting upper and lower motor neurons and resulting in fatal paralysis. Sensory abnormalities are absent. Death usually occurs within 2 to 5 years. The etiology of amyotrophic lateral sclerosis is likely to be multifactorial, involving both genetic and environmental factors. The disease is inherited in 5-10% of cases leading to familial forms.

Sequence similarities

Belongs to the Cu-Zn superoxide dismutase family.

Post-translational modifications

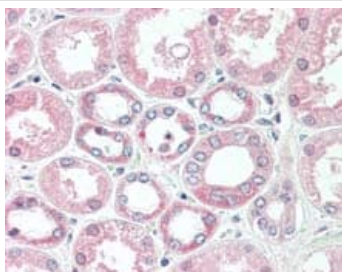
Unlike wild-type protein, the pathogenic variants ALS1 Arg-38, Arg-47, Arg-86 and Ala-94 are polyubiquitinated by RNF19A leading to their proteasomal degradation. The pathogenic variants ALS1 Arg-86 and Ala-94 are ubiquitinated by MARCH5 leading to their proteasomal degradation.

The ditryptophan cross-link at Trp-33 is responsible for the non-disulfide-linked homodimerization. Such modification might only occur in extreme conditions and additional experimental evidence is required.

Cellular localization

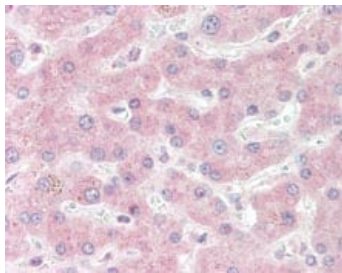
Cytoplasm. The pathogenic variants ALS1 Arg-86 and Ala-94 gradually aggregates and accumulates in mitochondria.

Images



Human Kidney (formalin-fixed, paraffin-embedded) stained with ab115750 at 15 µg/ml followed by biotinylated anti-mouse IgG secondary antibody, alkaline phosphatase-streptavidin and chromogen.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Superoxide Dismutase 1 antibody [2F5] (ab115750)



Human Liver (formalin-fixed, paraffin-embedded) stained with ab115750 at 15 ug/ml followed by biotinylated anti-mouse IgG secondary antibody, alkaline phosphatase-streptavidin and chromogen.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Superoxide Dismutase 1 antibody [2F5] (ab115750)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

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