

## Datasheet for ABIN7599676 anti-NFS1 antibody (AA 107-356)



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Quantity:	100 μg	
Target:	NFS1	
Binding Specificity:	AA 107-356	
Reactivity:	Human, Mouse, Rat	
Host:	Rabbit	
Clonality:	Polyclonal	
Conjugate:	This NFS1 antibody is un-conjugated	
Application:	Western Blotting (WB), ELISA, Immunoprecipitation (IP), Flow Cytometry (FACS)	
Product Details		
Purpose:	Anti-NFS1 Antibody Picoband®	
Immunogen:	E.coli-derived human NFS1 recombinant protein (Position: R107-L356). Human NFS1 shares 96.4% and 96% amino acid (aa) sequence identity with mouse and rat NFS1, respectively.	
Characteristics:	Anti-NFS1 Antibody Picoband® (ABIN7599676). Tested in WB, IP, Flow Cytometry, ELISA applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.	
Purification:	Immunogen affinity purified.	

## **Target Details**

Target Details			
Target:	NFS1		
Alternative Name:	NFS1 (NFS1 Products)		
Background:	Cysteine desulfurase, mitochondrial is an enzyme that in humans is encoded by the NFS1 gene.		
	Iron-sulfur clusters are required for the function of many cellular enzymes. The proteins		
	encoded by this gene supply inorganic sulfur to these clusters by removing the sulfur from		
	cysteine, creating alanine in the process. This gene uses alternate in-frame translation initiation		
	sites to generate mitochondrial forms and cytoplasmic/nuclear forms. Selection of the		
	alternative initiation sites is determined by the cytosolic pH . The encoded proteins belong to		
	the class-V family of pyridoxal phosphate-dependent aminotransferases. Alternatively spliced		
	transcript variants have been described.		
Molecular Weight:	45 kDa		
Gene ID:	9054		
UniProt:	Q9Y697		
Pathways:	Transition Metal Ion Homeostasis		
Application Details			
Application Notes:	Western blot, 0.25-0.5 µg/mL, Human, Mouse, Rat		
	Immunoprecipitation, 0.5-2 μg/mL, Human		
	Flow Cytometry (Fixed), 1-3 µg/1x10 <sup>6</sup> cells, Human		
	ELISA, 0.1-0.5 μg/mL, -		
	1. Alvarez, S. W., Sviderskiy, V. O., Terzi, E. M., Papagiannakopoulos, T., Moreira, A. L., Adams, S.,		
	Sabatini, D. M., Birsoy, K., Possemato, R. NFS1 undergoes positive selection in lung tumours		
	and protects cells from ferroptosis. Nature 551: 639-643, 2017. Note: Erratum: Nature 609: E12,		

1. Alvarez, S. W., Sviderskiy, V. O., Terzi, E. M., Papagiannakopoulos, T., Moreira, A. L., Adams, S., Sabatini, D. M., Birsoy, K., Possemato, R. NFS1 undergoes positive selection in lung tumours and protects cells from ferroptosis. Nature 551: 639-643, 2017. Note: Erratum: Nature 609: E12, 2022. 2. Biederbick, A., Stehling, O., Rosser, R., Niggemeyer, B., Nakai, Y., Elsasser, H.-P., Lill, R. Role of human mitochondrial Nfs1 in cytosolic iron-sulfur protein biogenesis and iron regulation. Molec. Cell. Biol. 26: 5675-5687, 2006. 3. Farhan, S. M. K., Wang, J., Robinson, J. F., Lahiry P., Siu, V. M., Prasad, C., Kronick, J. B., Ramsay, D. A., Rupar C. A., Hegele, R. A. Exome sequencing identifies NFS1 deficiency in a novel Fe-S cluster disease, infantile mitochondrial complex II/III deficiency. Molec. Genet. Genomic Med. 2: 73-80, 2014.

Restrictions: For Research Use only

## Handling

Format:	Lyophilized	
Reconstitution:	Adding 0.2 mL of distilled water will yield a concentration of 500 µg/mL.	
Concentration:	500 μg/mL	
Buffer:	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.	
Storage:	4 °C,-20 °C	
Storage Comment:	At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month.  It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.	