

Datasheet for ABIN7317556

CUTC Protein (His tag)

[Go to Product page](#)

Overview

Quantity:	100 µg
Target:	CUTC
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This CUTC protein is labelled with His tag.

Product Details

Purpose:	Recombinant Human CUTC/CGI-32 Protein (His Tag)
Sequence:	Met 1-Val 273
Characteristics:	A DNA sequence encoding the human CUTC (Q9NTM9) (Met 1-Val 273) was expressed, with an N-terminal polyhistidine tag.
Purity:	> 92 % as determined by reducing SDS-PAGE.

Target Details

Target:	CUTC
Alternative Name:	CUTC/CGI-32 (CUTC Products)
Background:	Background: Copper homeostasis protein cutC homolog, also known as CGI-32 and CUTC, is a cytoplasm and nucleus protein which belongs to the CutC family. CUTC may play a role in copper homeostasis. It can bind one Cu1+ per subunit. Copper is an essential trace element to life and particularly plays a pivotal role in the physiology of aerobic organisms. Copper is a

Target Details

micronutrient that is required for proper metabolic functioning of most prokaryotic and eukaryotic organisms. To sustain an adequate supply of copper, a cell requires molecular mechanisms that control the metal content to avoid copper toxicity. This toxicity comes primarily from the reactivity of copper, which can lead to the generation of free radicals. In bacteria, two independent systems are responsible for maintaining the balance of copper within the cells (Cop and Cut family proteins). The Cut protein family is associated with copper homeostasis and involved in uptake, storage, delivery, and efflux of copper. CutC is a member of the Cut family and is suggested to be involved in efflux trafficking of cuprous ion. CutC is able to respond transcriptionally to copper and to participate in the control of copper homeostasis in *E. faecalis*.

Synonym: CGI-32

Molecular Weight:	31 kDa
UniProt:	Q9NTM9
Pathways:	Transition Metal Ion Homeostasis

Application Details

Restrictions:	For Research Use only
---------------	-----------------------

Handling

Format:	Lyophilized
Reconstitution:	Please refer to the printed manual for detailed information.
Buffer:	Lyophilized from sterile PBS, 10 % glycerol, pH 7.4
Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.