

Recombinant Human CUTC / CGI-32 Protein (His tag)

Cat.NO.: TP06250

3th Edition

Synonyms:CGI-32

Description: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 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*.

Form:PBS

Molecular Weight:31 kDa

Sequences:Met 1-Val 273

Purity:> 95% by HPLC

Concentration:

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage:Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.