

## 32-8735: Recombinant *Dechloromonas aromatica* (Strain RCB) Chlorite Dismutase (N-6His)

**Gene :** Daro\_2580

**Uniprot ID :** Q47CX0

### Description

Source: E.coli.

MW :31.3kD.

Recombinant *Dechloromonas aromatica* (strain RCB) Chlorite dismutase Chlorite dismutase is produced by our E.coli expression system and the target gene encoding Met35-Asp282 is expressed with a 6His tag at the N-terminus. Chlorite dismutase (Cld) found in prokaryotic organisms, also known as Chlorite O<sub>2</sub>-lyase, is a b-type heme containing enzyme that catalyzes the reduction of chlorite into chloride plus dioxygen. The subunit of chlorite dismutase consists of a heme free N-terminal and a heme b containing C-terminal ferredoxin-like fold with high structural homology to the dye-decolorizing peroxidases (DyPs). The physiological role of Cld in prokaryote has been shown that some microorganisms can use perchlorate or chlorate as terminal electron acceptors for anaerobic respiration thereby producing chlorite that must be detoxified. This enzyme has gained attention because it can be used in the development of bioremediation processes, biosensors, and controlled dioxygen production.

### Product Info

**Amount :** 10 µg / 50 µg

**Content :** Lyophilized from a 0.2 µm filtered solution of PBS, 0.5mM EDTA, pH7.4.

**Storage condition :** Lyophilized protein should be stored at -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at -20°C for 3 months.

**Amino Acid :** MGSSHHHHHSSGLVPRGSHMENLYFQGMQPMQSMKIERGTILTQPGVFGVFTMFKLRPDWNNKVPVAERKG  
AAEEVKKLIKHKDNLVDLYLTRGLETNSDFFRINAYDLAKAQTFMREFRSTTVGKNADVFTLVGVTKPLNY  
ISKDKSPGLNAGLSSATYSGPAPRYVIVIPVKNAEWWNMSPEERLKEMEVTHTPTLAYLVNVKRKLYHSTGLD  
DTDFITYFETDDLTAFNNLMSLAQVKENKFHVRWGSPTTLGTIHSPEDVIKALAD

### Application Note

**Endotoxin :** Less than 0.1 ng/Åµg (1 IEU/Åµg) as determined by LAL test.