

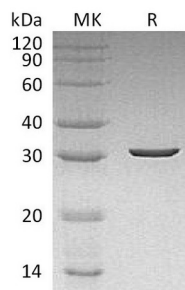
**Product Name: Recombinant Dechloromonas aromatica Cld (N-6His)**  
**Catalog #: PEV0406**

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## Summary

<b>Name</b>	Chlorite Dismutase
<b>Purity</b>	Greater than 95% as determined by reducing SDS-PAGE
<b>Endotoxin level</b>	<1 EU/ $\mu$ g as determined by LAL test.
<b>Construction</b>	Recombinant Dechloromonas Aromatica 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.
<b>Accession #</b>	Q47CX0
<b>Host</b>	E.coli
<b>Species</b>	Dechloromonas aromatica
<b>Predicted Molecular Mass</b>	31.3 KDa
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m filtered solution of 20mM Tris-HCl, 150mM NaCl, 0.5mM EDTA, 4% sucrose, 0.02% Tween 80, pH 7.4.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
<b>Stability&amp;Storage</b>	Store at $\leq$ -70°C, stable for 6 months after receipt. Store at $\leq$ -70°C, stable for 3 months under sterile conditions after opening. Please minimize freeze-thaw cycles.
<b>Reconstitution</b>	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 $\mu$ g/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

## SDS-PAGE image



## Background

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**Alternative Names**

Chlorite dismutase; Chlorite O(2)-lyase; Daro\_2580; Cld

**Background**

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.

**Note**

For Research Use Only , Not for Diagnostic Use.