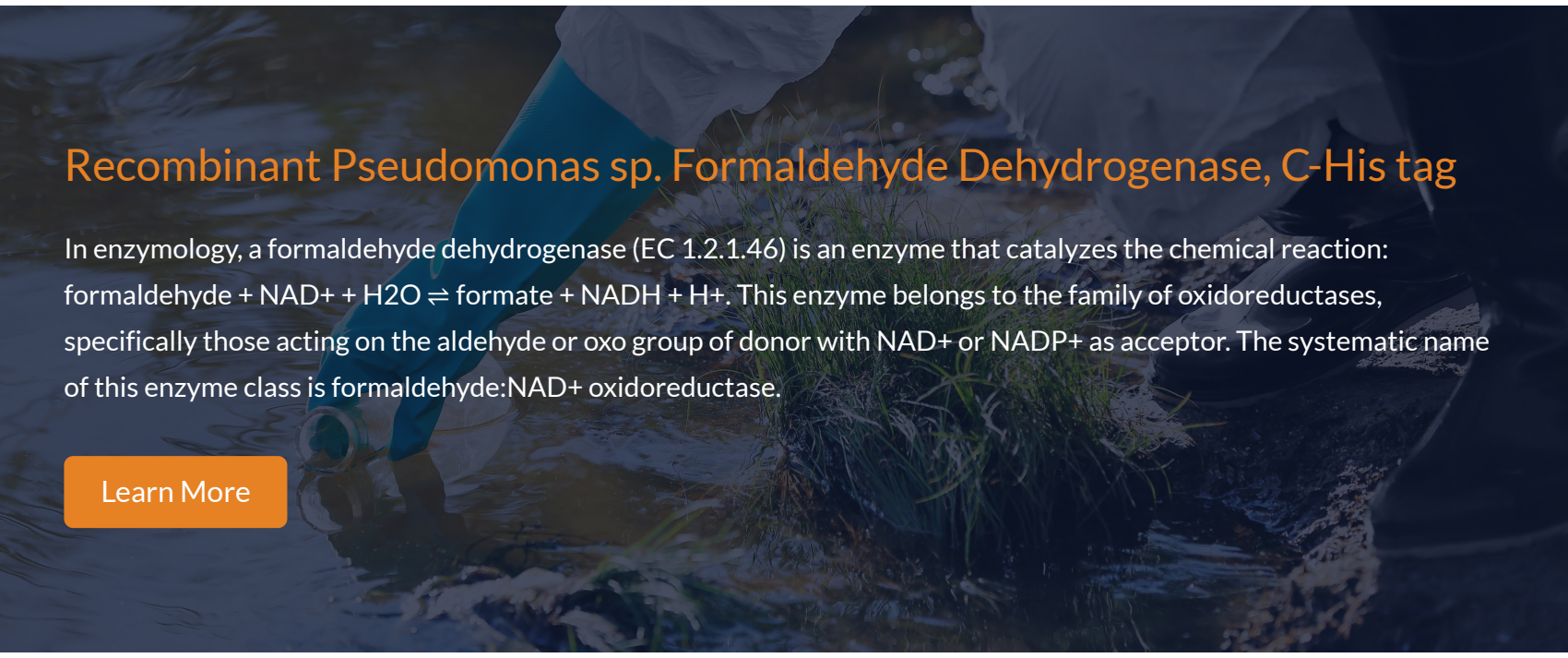

Recombinant Pseudomonas sp. Formaldehyde Dehydrogenase, C-His tag

In enzymology, a formaldehyde dehydrogenase (EC 1.2.1.46) is an enzyme that catalyzes the chemical reaction: formaldehyde + NAD+ + H2O ⇌ formate + NADH + H+. This enzyme belongs to the family of oxidoreductases, specifically those acting on the aldehyde or oxo group of donor with NAD+ or NADP+ as acceptor. The systematic name of this enzyme class is formaldehyde:NAD+ oxidoreductase.

Learn More

Product Information

Product Name	Recombinant Pseudomonas sp. Formaldehyde Dehydrogenase, C-His tag
Cat No.	EXWM-1149
EC No.	EC 1.2.1.46
Activity	2 U/mg
Source	E. coli
Species	Pseudomonas sp.
Purity	>95% by SDS-PAGE
Form	Liquid

Applications

- Bioconversion of formaldehyde: Formaldehyde dehydrogenase is used in bioremediation processes to convert formaldehyde, a toxic and carcinogenic compound, into less harmful molecules such as formate.
- Production of formate: Formaldehyde dehydrogenase is also utilized in the production of formate, which serves as an important precursor for various chemical compounds.
- Biosensor development: Formaldehyde dehydrogenase can be incorporated into biosensors for the detection of formaldehyde in environmental samples, food products, and industrial processes.
- Biocatalysis: Formaldehyde dehydrogenase can be employed as a biocatalyst in enzymatic reactions for the synthesis of valuable chemicals, pharmaceuticals, and biofuels.
- Research and diagnostics: Formaldehyde dehydrogenase is a valuable tool for studying formaldehyde metabolism in microorganisms and elucidating the enzymatic mechanisms involved in formaldehyde detoxification. This enzyme is also used in diagnostic assays to analyze formaldehyde concentrations in biological samples and assess cellular responses to formaldehyde exposure.

Creative Enzymes also provides other enzyme products for research or industry uses. Please contact us for any needs.

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