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Produktinformation



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Diagnostik & molekulare Diagnostik



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Lieferung & Zahlungsart

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Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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PRODUCT INFORMATION



α -Enolase (human, recombinant)

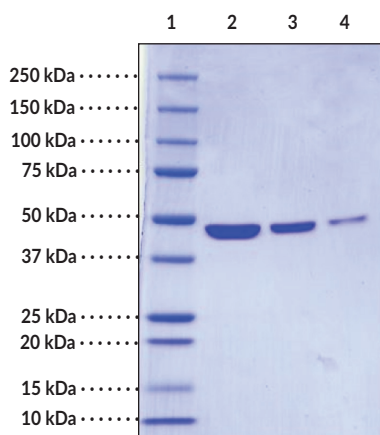
Item No. 25151

Overview and Properties

Synonym: Enolase-1
Source: Recombinant enolase expressed in *E. coli*
Amino acids: 1-434 (full length)
Uniprot No.: P06733
Molecular Weight: 47.74 kDa
Storage: -80°C (as supplied); avoid freeze/thaw cycles by aliquoting protein
Stability: ≥ 1 year
Purity: $\geq 95\%$ estimated by SDS-PAGE
Supplied in: 20 mM HEPES, pH 7.5, 150 mM sodium chloride, and 5% glycerol
Protein Concentration: *batch specific*

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Image



Lane 1: MW Markers
Lane 2: α -Enolase (5 μ g)
Lane 3: α -Enolase (2.5 μ g)
Lane 4: α -Enolase (1 μ g)

Representative gel image shown; actual purity may vary between each batch.

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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PRODUCT INFORMATION



Description

α -Enolase, also known as enolase-1, is a glycolytic enzyme that catalyzes the conversion of 2-phosphoglycerate to phosphoenolpyruvate.¹ It is ubiquitously expressed in human tissues, including liver, spleen, kidney, and brain. In cells, α -enolase is primarily localized to the cytoplasm, however, an alternatively translated form localizes to the nucleus and lacks glycolytic enzyme activity.^{1,2} α -Enolase also functions as a cell surface receptor for plasminogen on pathogens and activated immune cells, as an oxidative stress protein in endothelial cells, and as a chromatin binding partner to facilitate transcription.²⁻⁴ The *ENO1* promoter contains a hypoxia-response element, allowing α -enolase to facilitate aerobic glycolysis and contribute to the Warburg effect in tumor cells.² α -Enolase is overexpressed in multiple tumors, including glioma, neuroblastoma, pancreatic, prostate, and hepatocellular carcinomas. Its role as a plasminogen receptor facilitates extracellular matrix degradation and cancer invasion.⁴ α -Enolase is an autoantigen in asthma, Hashimoto's encephalopathy, and rheumatoid arthritis, and has been found in the serum of pediatric patients with juvenile idiopathic arthritis.⁵⁻⁸

References

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