# **PRODUCT** INFORMATION



Citrullinated α-Enolase (R8 + R14) (1-19)-biotin Peptide

Item No. 37627

## **Overview and Properties**

Contents:	This vial contains 1 mg of lyophilized peptide
Synonyms:	Citrullinated Enolase-1-biotin, $\alpha$ -Enolase Peptide (Citrulline Residues 8 + 14)
Peptide Sequence:	Biotin-SILKIHAXEIFDSXGNPTV (X=Citrulline)
Uniprot No.:	P06733
Molecular Weight:	2,381.5
Form:	Solid
Storage:	-20°C (as supplied)
Stability:	≥3 years

### Description

Citrullinated  $\alpha$ -Enclase (R8 + R14) (1-19)-biotin peptide is a biotinvlated and citrullinated form of a 19-amino acid N-terminal peptide fragment of  $\alpha$ -enolase, a glycolytic enzyme that catalyzes the conversion of 2-phosphoglycerate to phosphoenolpyruvate.<sup>1</sup>  $\alpha$ -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.<sup>2-4</sup>  $\alpha$ -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.<sup>5-8</sup> α-Enolase is also subject to citrullination by peptidyl arginine deiminases (PADs) and citrullinated  $\alpha$ -enolase has been found in the synovial fluid of rheumatoid arthritis patients.<sup>7</sup> Cayman's Citrullinated  $\alpha$ -Enolase (R8 + R14) (1-19)-biotin Peptide is intended for use in the detection of autoantibodies against  $\alpha$ -enolase citrullinated at R8 and R13.

#### References

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- 6. Moore, T.L., Gillian, B.E., Crespo-Pagnussat, S., et al. Measurement and evaluation of isotypes of anti-citrullinated fibrinogen and anti-citrullinated  $\alpha$ -enolase antibodies in iuvenile idiopathic arthritis. Clin. Exp. Rheumatol. 32(5), 740-746 (2014).
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- 8. Cong, Y., Wang, L., Peng, R., et al. Timosaponin AIII induces antiplatelet and antithrombotic activity via Gq-mediated signaling by the thromboxane A2 receptor. Sci. Rep. 6, 38757 (2016).

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

#### SAFFTY 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.

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