

# PRODUCT INFORMATION



## Vimentin (G146R) (139-159)-biotin Peptide

Item No. 37623

### Overview and Properties

<b>Contents:</b>	This vial contains 1 mg of lyophilized peptide.
<b>Synonyms:</b>	Biotin-GQGKSRLRDLYEEEMRELRQ, VIM (G146R) (139-159)-biotin
<b>Uniprot No.:</b>	P08670
<b>Molecular Weight:</b>	2,876.25
<b>Form:</b>	Solid
<b>Storage:</b>	-20°C (as supplied)
<b>Stability:</b>	≥3 years

### Description

Vimentin (G146R) (139-159)-biotin peptide is a biotinylated version of a mutant isoform of the cytoskeleton intermediate filament protein vimentin, vimentin<sup>G146R</sup>, which undergoes citrullination and has been found as the citrullinated form in the synovial fluid of rheumatoid arthritis patients.<sup>1</sup> Vimentin is subject to citrullination by peptidyl arginine deiminase 2 (PAD2) under high calcium concentrations, which can occur during macrophage apoptosis.<sup>2,3</sup> Cayman's Vimentin (G146R) (139-159)-biotin Peptide is intended for use as a negative control in the detection of autoantibodies against citrullinated vimentin<sup>G146R</sup> and is the non-citrullinated form of Citrullinated Vimentin (G146R) (R144 + R146) (139-159)-biotin Peptide (Item No. 37625).

### References

1. Bang, H., Egerer, K., Gauliard, A., *et al.* Mutation and citrullination modifies vimentin to a novel autoantigen for rheumatoid arthritis. *Arthritis Rheum.* **56(8)**, 2503-2511 (2007).
2. Li, F.J., Surolia, R., Li, H., *et al.* Citrullinated vimentin mediates development and progression of lung fibrosis. *Sci. Transl. Med.* **13(585)**, eaba2927 (2021).
3. Asaga, H., Yamada, M., and Senshu, T. Selective deimination of vimentin in calcium ionophore-induced apoptosis of mouse peritoneal macrophages. *Biochem. Biophys. Res. Commun.* **243(3)**, 641-646 (1998).

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  
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CAYMAN CHEMICAL  
1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA  
PHONE: [800] 364-9897  
[734] 971-3335  
FAX: [734] 971-3640  
CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM