



SZABO SCANDIC

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

Product Information



Optineurin (INT) Blocking Peptide

Item No. 300002

Apoptosis is controlled by a variety of signaling mechanisms and is relevant to several diseases and normal development. Optineurin (originally named FIP-2: 14.7K interacting protein-2) is a 74 kDa protein implicated in signal transduction of the tumor necrosis factor (TNF) pathway as presented in a study of adenovirus proteins that prevent cytolysis after TNF α stimulation.¹ Optineurin can be phosphorylated; however, it is currently unknown what kinases achieve this or what other mammalian proteins interact with it downstream of TNF α or Fas signaling.^{1,2}

Working at or near cell membranes and in concert with Rab8 and Huntingtin, optineurin has been implicated in membrane traffic regulation and cellular morphogenesis.³ The exact role of optineurin protein in apoptosis is currently unknown and interestingly optineurin gene mutations have been correlated with certain types of glaucoma.⁴⁻⁶ Increased apoptosis of trabecular meshwork cells is an identified factor for pathogenesis of glaucoma.⁷

Laboratory Procedures

This vial contains 200 μ g of peptide in 200 μ l TBS, pH 7.4, containing 0.1% BSA and 0.02% sodium azide. This peptide is the human optineurin sequence of amino acids 115-130 (KGKSERSSDPTDDSR). This blocking peptide can be used in conjunction with Cayman's Optineurin (INT) Polyclonal Antibody (Item No. 100002) to block protein-antibody complex formation during immunochemical analysis of optineurin.

Store this peptide solution at -20°C. It will be stable for at least two years. To block antibody/protein complex formation, the following procedure is recommended:

1. Mix the Optineurin (INT) Polyclonal Antibody (Item No. 100002) and blocking peptide together in a 1:2 (v/v) ratio in a microfuge tube. For example, mix 20 μ l of antibody and 20 μ l of peptide.*
2. Incubate for one hour at room temperature with occasional mixing prior to further dilution and application of the mixture to the immunoblot.
3. Dilute the mixture to the final working antibody concentration and apply to the slide or membrane as usual.

*This is a recommended mixture. The minimum amount of peptide needed for complete blocking has not been precisely determined and may vary depending on the sample being analyzed. The amount of peptide required may need to be increased if sufficient blocking does not occur.

References

1. Li, Y., Kang, J., and Horwitz, M.S. Interaction of an adenovirus E₃ 14.7-kilodalton protein with a novel tumor necrosis factor α -inducible cellular protein containing leucine zipper domains. *Mol. Cell Biol.* **18(3)**, 1601-1610 (1998).
2. Schwamborn, K., Weil, R., Courtois, G., *et al.* Phorbol esters and cytokines regulate the expression of the NEMO-related protein, a molecule involved in a NF- κ B-independent pathway. *J. Biol. Chem.* **275(30)**, 22780-22789 (2000).
3. Hatula, K. and Peränen, J. FIP-2, a coiled-coil protein, links Huntingtin to Rab8 and modulates cellular morphogenesis. *Curr. Biol.* **10**, 1603-1606 (2000).
4. Rezaie, T., Child, A., Hitchings, R., *et al.* Adult-onset primary open-angle glaucoma caused by mutations in optineurin. *Science* **295**, 1077-1079 (2002).
5. Kamphuis, W. and Schneeman, A. Optineurin gene expression level in human trabecular meshwork does not change in response to pressure elevation. *Ophthalmic Res.* **35**, 93-96 (2003).
6. Vittitow, J.L. and Borrás, T. Expression of optineurin, a glaucoma-linked gene, is influenced by elevated intraocular pressure. *Biochem. Biophys. Res. Commun.* **298**, 67-74 (2002).
7. Wang, N., Chintala, S.K., Fini, M.E., *et al.* Activation of a tissue-specific stress response in the aqueous outflow pathway of the eye defines the glaucoma disease phenotype. *Nature Med.* **7**, 304-309 (2001).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/300002

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman **warrants only** to the original customer that the material will **meet our specifications at the time of delivery.**

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have **any obligation or liability**, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees.

Buyer's **exclusive remedy** and Cayman's sole liability hereunder shall be limited to a **refund** of the purchase price, or at Cayman's option, the **replacement**, at no cost to Buyer, of all material that does not meet our specifications.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

For further details, please refer to our **Warranty and Limitation of Remedy** located on our website and in our catalog.

Copyright Cayman Chemical Company, 08/31/2012

Cayman Chemical

Mailing address

1180 E. Ellsworth Road
Ann Arbor, MI
48108 USA

Phone

(800) 364-9897
(734) 971-3335

Fax

(734) 971-3640

E-Mail

custserv@caymanchem.com

Web

www.caymanchem.com