

# Produktinformation



Forschungsprodukte & Biochemikalien
Zellkultur & Verbrauchsmaterial
Diagnostik & molekulare Diagnostik
Laborgeräte & Service

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Lieferung & Zahlungsart siehe unsere Liefer- und Versandbedingungen

# Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

## SZABO-SCANDIC HandelsgmbH

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# Product Information



### TAPI-2

Item No. 14695

CAS Registry No.:	187034-31-7	
Formal Name:	N-[2-[2-(hydroxyamino)-2-oxoethyl]-	
Synonym: MF: FW: Purity: Stability: Supplied as:	4-methyl-1-oxopentyl]-3-methyl-L- valyl-N-(2-aminoethyl)-L-alaninamide TNF Protease Inhibitor 2 C <sub>19</sub> H <sub>37</sub> N <sub>5</sub> O <sub>5</sub> 415.5 ≥95% ≥2 years at -20°C A crystalline solid	$HO \longrightarrow H O \longrightarrow H O H H O H H O H H O H H O H H O H O$

#### Laboratory Procedures

For long term storage, we suggest that TAPI-2 be stored as supplied at -20°C. It should be stable for at least two years. TAPI-2 is supplied as a crystalline solid. A stock solution may be made by dissolving the TAPI-2 in the solvent of choice. TAPI-2 is soluble in ethanol and water at a concentration of approximately 5 and 8 mg/ml, respectively. We do not recommend storing the aqueous solution for more than one day.

The extracellular domains of many different types of transmembrane proteins, including growth factors, growth factor receptors, and cell adhesion molecules, are proteolytically released (shed) in response to environmental cues. TAPI-2 is a broad-spectrum inhibitor of TNF- $\alpha$  converting enzyme (TACE), other ADAMs (a disintegrin and metalloproteinases), and other matrix metalloproteinases. It inhibits phorbol-12-myristate-13-acetate-induced (PMA) shedding of various cell surface proteins, such as TGF- $\alpha$ ,  $\beta$  amyloid precursor protein, L-selectin, and IL-6 receptor  $\alpha$ subunit, with an IC<sub>50</sub> value of 10  $\mu$ M.<sup>1</sup> TAPI-2 inhibits ADAM8, 10, 12, and TACE with K<sub>i</sub> values of 10, 3, 100, and 0.12 μM, respectively.<sup>2</sup> In T4-2 breast cancer cells, 20 μM TAPI-2 prevented mobilization of the growth factors TGF-α and amphiregulin leading to reversion of the malignant cellular phenotype.<sup>3</sup>

#### References

- 1. Arribas, J., Coodly, L., Vollmer, P., et al. Diverse cell surface protein ectodomains are shed by a system sensitive to metalloprotease inhibitors. J. Biol. Chem. 271(19), 11376-11386 (1996).
- 2. Moss, M.L. and Rasmussen, F.H. Fluorescent substrates for the proteinases ADAM17, ADAM10, ADAM8, and ADAM12 useful for high-throughput inhibitor screening. Anal. Biochem. 366(2), 144-148 (2007).
- 3. Kenny, P.A. and Bissell, M.J. Targeting TACE-dependent EGFR ligand shedding in breast cancer. J. Clin. Invest. 117(2), 337-345 (2007).

#### **Related Products**

For a list of related products please visit: www.caymanchem.com/catalog/14695

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WARNING: This product is for laboratory research only: not for administration to humans. Not for human or veterinary DIAGNOSTIC OR THERAPEUTIC USE.

#### 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 Safety Data Sheet, which has been sent via email to your institution.

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