



# 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](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

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

# PRODUCT INFORMATION



## Gcn5 (human, recombinant)

Item No. 10782

### Overview and Properties

**Synonyms:** General control of amino acid synthesis protein 5-like 2, KAT2A, Lysine acetyltransferase 2A, STAF97

**Source:** Active recombinant N-terminal His-tagged protein expressed in Sf21 cells

**Amino Acids:** 2-837 (full-length)

**Uniprot No.:** Q92830

**Molecular Weight:** 96.3 kDa

**Storage:** -80°C (as supplied); avoid freeze/thaw cycles by aliquoting protein

**Stability:** ≥2 years

**Purity:** ≥50% estimated by SDS-PAGE

**Supplied in:** 50 mM Tris, pH 8.0, with 150 mM sodium chloride and 20% glycerol

**Protein Concentration:** *batch specific* mg/ml

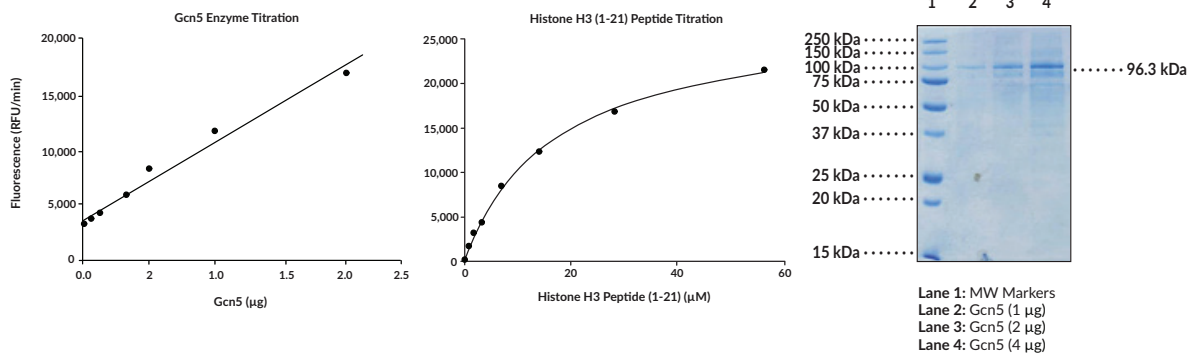
**Activity:** *batch specific* U/ml

**Specific Activity:** *batch specific* U/mg

**Unit Definition:** One unit is defined as the amount of enzyme required to convert 1 nmol of acetyl-CoA to reduced Coenzyme A (CoASH) per minute at 37°C in 100 mM HEPES, pH 7.5, containing 0.8% polysorbate 20. CoASH produced in the reaction is measured fluorometrically (ex. 390/em. 469) using Cayman's HAT Inhibitor Screening Assay Kit (Item No. 10006515) with 100 μM histone H3 peptide (1-21) as the acetyl acceptor.

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

### Images



SDS-PAGE Analysis of Gcn5.

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.

Copyright Cayman Chemical Company, 09/02/2021

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

# PRODUCT INFORMATION



## Description

---

Gcn5 and PCAF are highly homologous members of the Gcn5-related N-acetyltransferase (GNAT) superfamily of N-acetyltransferases involved in histone acetylation.<sup>1</sup> Gcn5 and PCAF contain a highly conserved central core with divergent N- and C-terminal ends.<sup>2</sup> Gcn5/PCAF are enzymatic subunits that exist in a mutually exclusive manner as part of the mammalian SAGA and ATAC complexes.<sup>3,4</sup> Recombinant Gcn5 preferentially acetylates lysine 14 on histone H3 *in vitro*. Recombinant Gcn5 alone is unable to acetylate nucleosomal core histone substrates. Acetylation of the nucleosomal histones requires that Gcn5 be a part of either the multisubunit SAGA or ATAC protein complexes.<sup>5</sup> The multisubunit Gcn5/PCAF-containing complexes have a broad substrate specificity, including H3K9, H3K18, H4K8, and H4K16, as well as additional sites on histone H2B.<sup>3</sup>

## References

---

1. Vetting, M.W., de Carvalho, L.P.S., Yu, M., *et al.* Structure and functions of the GNAT superfamily of acetyltransferases. *Arch. Biochem. Biophys.* **433(1)**, 212-226 (2005).
2. Trievel, R.C., Rojas, J.R., Sterner, D.E., *et al.* Crystal structure and mechanism of histone acetylation of the yeast GCN5 transcriptional coactivator. *Proc. Natl. Acad. Sci. USA* **96(16)**, 8931-8936 (1999).
3. Roth, S.Y., Denu, J.M., and Allis, C.D. Histone acetyltransferases. *Annu. Rev. Biochem.* **70**, 81-120 (2001).
4. Wang, Y.L., Faiola, F., Xu, M., *et al.* Human ATAC is a GCN5/PCAF-containing acetylase complex with a novel NC2-like histone fold module that interacts with the TATA-binding protein. *J. Biol. Chem.* **283(49)**, 33808-33815 (2008).
5. Grant, P.A., Sterner, D.E., Duggan, L.J., *et al.* The SAGA unfolds: Convergence of transcription regulators in chromatin-modifying complexes. *Trends Cell Biol.* **8(5)**, 193-197 (1998).