GSSeH combines with bGalNAc derivative

to form GSSebGalNac

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Introduction

Reactome is open-source, open access, manually curated and peer-reviewed pathway database. Pathway annotations are authored by expert biologists, in collaboration with Reactome editorial staff and cross-referenced to many bioinformatics databases. A system of evidence tracking ensures that all assertions are backed up by the primary literature. Reactome is used by clinicians, geneticists, genomics researchers, and molecular biologists to interpret the results of high-throughput experimental studies, by bioinformaticians seeking to develop novel algorithms for mining knowledge from genomic studies, and by systems biologists building predictive models of normal and disease variant pathways.

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Literature references

Fabregat, A., Sidiropoulos, K., Viteri, G., Forner, O., Marin-Garcia, P., Arnau, V. et al. (2017). Reactome pathway analysis: a high-performance in-memory approach. *BMC bioinformatics, 18*, 142. ↗

Sidiropoulos, K., Viteri, G., Sevilla, C., Jupe, S., Webber, M., Orlic-Milacic, M. et al. (2017). Reactome enhanced pathway visualization. *Bioinformatics, 33*, 3461-3467. ↗

Fabregat, A., Jupe, S., Matthews, L., Sidiropoulos, K., Gillespie, M., Garapati, P. et al. (2018). The Reactome Pathway Knowledgebase. *Nucleic Acids Res, 46*, D649-D655. ↗

Fabregat, A., Korninger, F., Viteri, G., Sidiropoulos, K., Marin-Garcia, P., Ping, P. et al. (2018). Reactome graph database: Efficient access to complex pathway data. *PLoS computational biology, 14*, e1005968. ↗

Reactome database release: 88
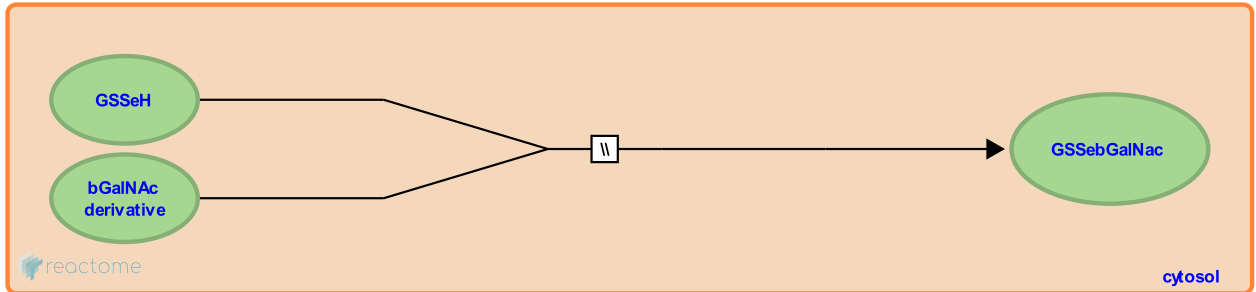
This document contains 1 reaction (see Table of Contents)

GSSeH combines with bGalNAc derivative to form GSSebGalNac ↗

Stable identifier: R-HSA-5333607

Type: omitted

Compartments: cytosol

Inferred from: GSSeH combines with bGalNAc derivative to form GSSebGalNac (Rattus norvegicus)

1beta-methylseleno-N-acetyl-D-galactosamine (bGalNAc) derivative combines with glutathioselenol (GSSeH) to form 1beta-glutathionylseleno-N-acetyl-D-galactosamine (GSSebGalNac) aka selenosugar A by an unknown mechanism. The actual enzyme or enzymes involved have yet to be identified. This reaction is inferred from the event in rat (Kobayashi et al. 2002).

Literature references

Kobayashi, Y., Suzuki, KT., Ogra, Y., Takayama, H., Aimi, N., Ishiwata, K. (2002). Selenosugars are key and urinary metabolites for selenium excretion within the required to low-toxic range. *Proc. Natl. Acad. Sci. U.S.A., 99*, 15932-6. ↗

Editions

2014-05-06	Authored	Williams, MG.
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