NTPDase8 hydrolyzes nucleoside triphosphates

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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. ↗

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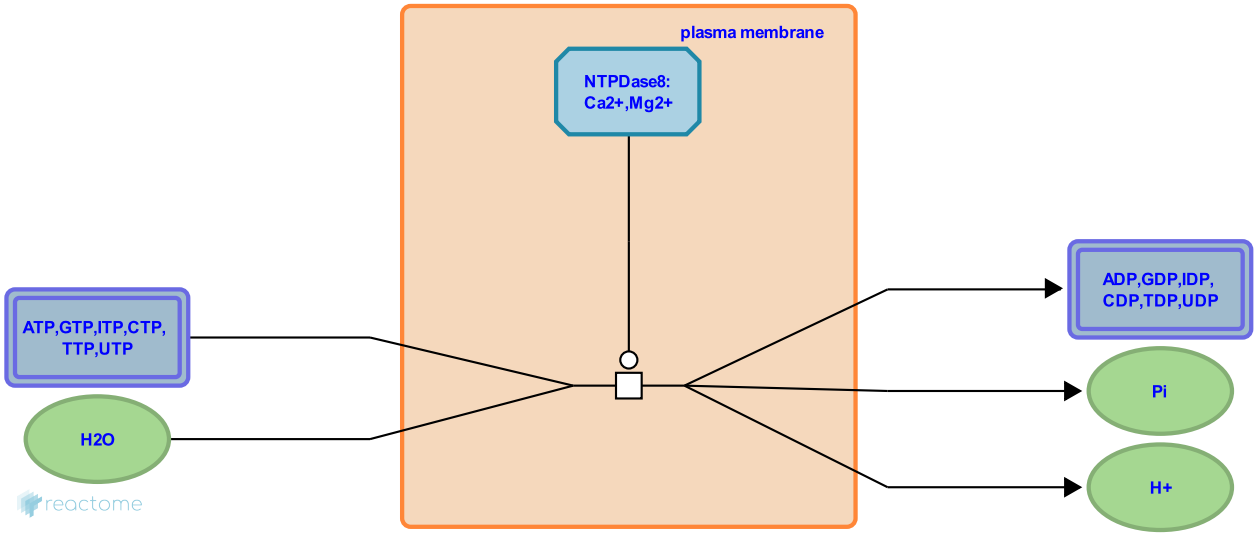
Stable identifier: R-HSA-8851538

Type: transition

Compartments: extracellular region, plasma membrane



NTPDase8, encoded by the ENTPD8 gene, is an E-NTPDase family ectonucleotide phosphatase that, in the presence of Ca2+ or Mg2+, hydrolyzes NTPs to NMPs, via corresponding NDP intermediates. NTPDase8 is more efficient in hydrolyzing NTPs than NDPs. NTPDase8 provides the main ectonucleotide phosphatase activity in rat and porcine livers (Sevigny et al. 2000, Fausther et al. 2007).

Literature references

Sévigny, J., Pelletier, J., Lecka, J., Dranoff, JA., Kukulski, F., Fausther, M. et al. (2007). Cloning, purification, and identification of the liver canalicular ecto-ATPase as NTPDase8. *Am. J. Physiol. Gastrointest. Liver Physiol., 292*, G785-95.

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Editions

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