AOC1 deaminates Hist

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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

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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. ↗

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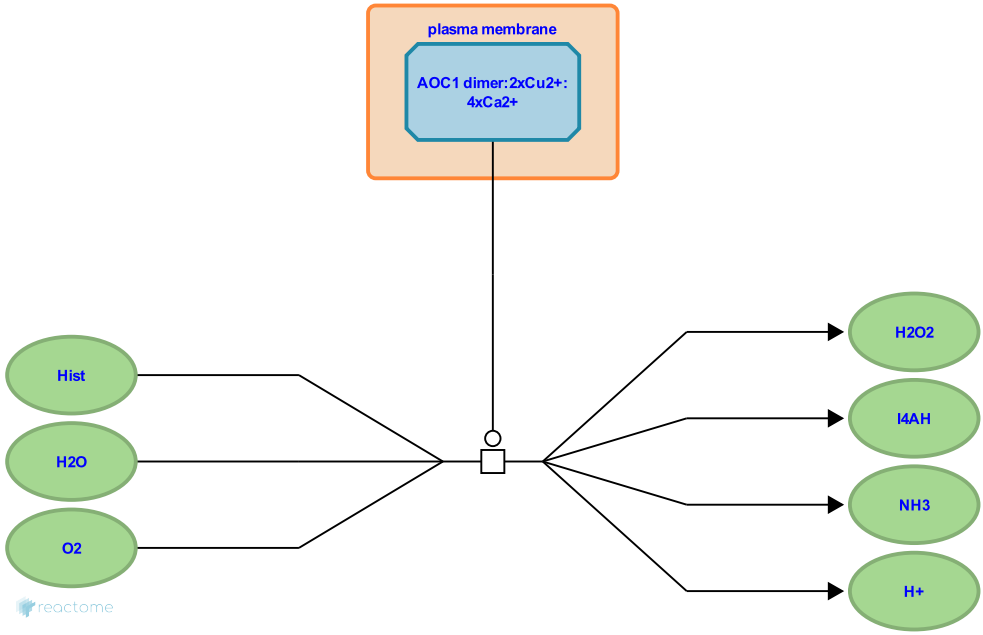
Stable identifier: R-HSA-5696131

Type: transition

Compartments: extracellular region, plasma membrane



Amiloride-sensitive, copper-containing amine oxidase (AOC1) can catalyse the oxidative deamination of diamines, particularly histamine (Hist) (McGrath et al. 2009). Histamine is involved in allergic and immune responses.

Literature references

McGrath, AP., Hilmer, KM., Collyer, CA., Shepard, EM., Elmore, BO., Brown, DE. et al. (2009). Structure and inhibition of human diamine oxidase. *Biochemistry, 48*, 9810-22. ↗

Editions

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