PERP binds desmosomes

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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. ↗

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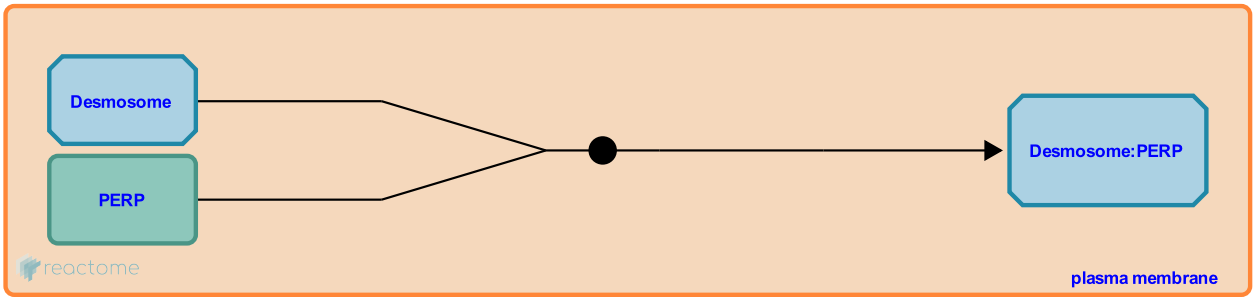
Stable identifier: R-HSA-6814695

Type: binding

Compartments: plasma membrane



PERP (p53 effector related to PMP-22) is a p53/p63 target gene involved in DNA damage-induced apoptosis (Flores et al. 2002). It is a tetraspan membrane protein,distantly related to members of the claudin/PMP-22/EMP family of four-pass membrane proteins (Attardi et al. 2000). It has an epithelial-specific expression pattern during embryogenesis and localizes to desmosomes. Perp -/- knockout mice exhibit numerous desmosomal structural defects, suggesting a role for Perp in promoting the stable assembly of desmosomal adhesive complexes (Ihrie et al. 2005).

Literature references

Horner, JS., Nguyen, BT., Papazoglu, C., Marques, MR., Attardi, LD., Bronson, RT. et al. (2005). Perp is a p63-regulated gene essential for epithelial integrity. *Cell, 120*, 843-56. ↗

Editions

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