

GLI1 binds HHIP gene, PTCH2 gene and BOC gene promoters

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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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Reactome database release: 76

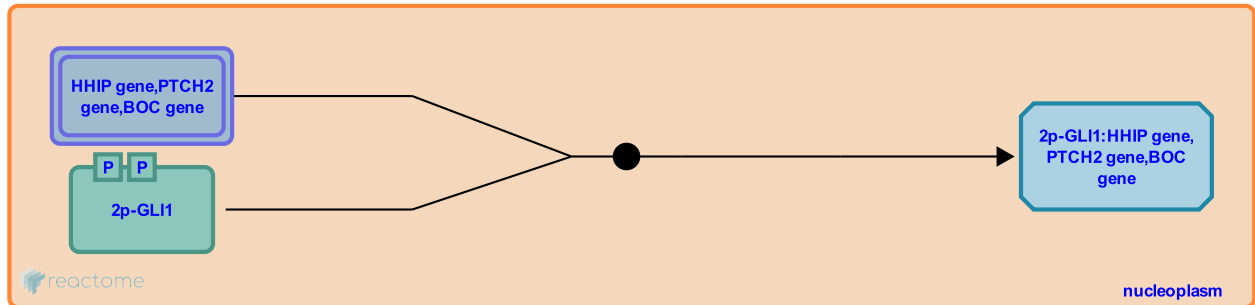
This document contains 1 reaction ([see Table of Contents](#))

GLI1 binds HHIP gene, PTCH2 gene and BOC gene promoters ↗

Stable identifier: R-HSA-5635850

Type: binding

Compartments: nucleoplasm



Genome-wide ChIP studies have identified Hh pathway members HHIP, PTCH2 and BOC as direct targets of GLI1 downstream of pathway activation (Vokes et al, 2007; Vokes et al, 2008; Lee et al, 2010).

Literature references

Vokes, SA., Ji, H., Wong, WH., McMahon, AP. (2008). A genome-scale analysis of the cis-regulatory circuitry underlying sonic hedgehog-mediated patterning of the mammalian limb. *Genes Dev.*, 22, 2651-63. ↗

Lee, EY., Ji, H., Ouyang, Z., Zhou, B., Ma, W., Vokes, SA. et al. (2010). Hedgehog pathway-regulated gene networks in cerebellum development and tumorigenesis. *Proc. Natl. Acad. Sci. U.S.A.*, 107, 9736-41. ↗

Vokes, SA., Ji, H., McCuine, S., Tenzen, T., Giles, S., Zhong, S. et al. (2007). Genomic characterization of Gli-activator targets in sonic hedgehog-mediated neural patterning. *Development*, 134, 1977-89. ↗

Editions

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