

FGFR4 binds to FGF

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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. [↗](#)

Reactome database release: 88

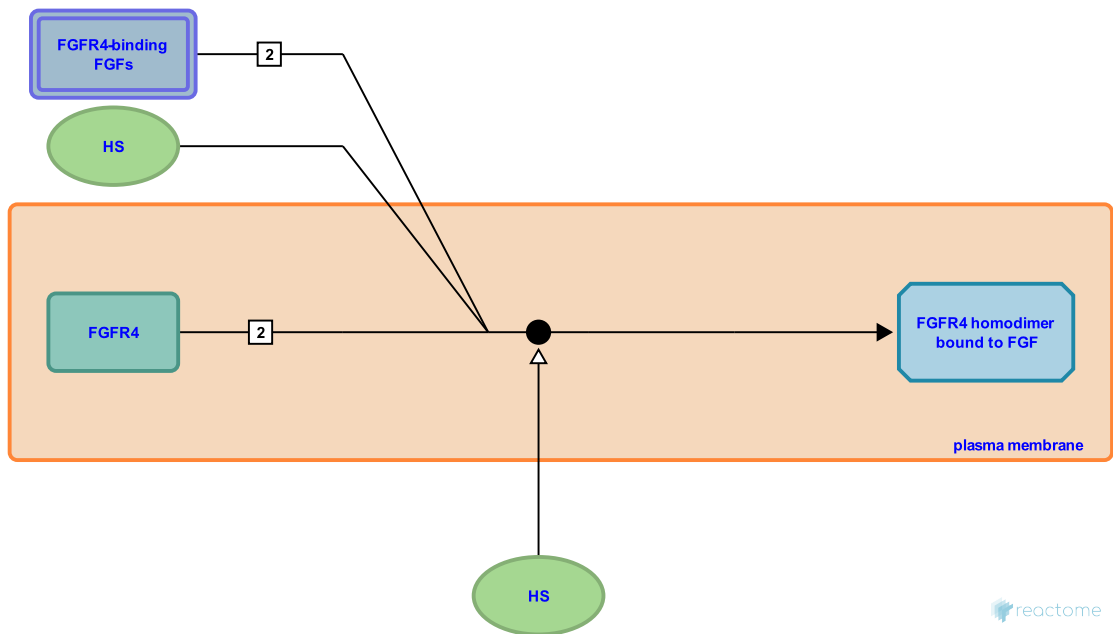
This document contains 1 reaction ([see Table of Contents](#))

FGFR4 binds to FGF ↗

Stable identifier: R-HSA-190265

Type: binding

Compartments: extracellular region, plasma membrane



In this reaction, FGF receptor in the plasma membrane binds an associating extracellular ligand, a requisite step for subsequent activation. The resulting complex consists of dimerized receptor, two ligand molecules, and heparan sulfate. Also, TGFBR3 (beta-glycan) facilitates the binding of FGF2 with its receptor FGFR1 by binding with FGF2 itself and bringing more ligands into receptor proximity (Andres et al. 1992, Knelson et al. 2013).

Literature references

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Ornitz, DM., Umemori, H., Mohammadi, M., Olsen, SK., Ibrahimi, OA., Zhang, X. (2006). Receptor specificity of the fibroblast growth factor family. The complete mammalian FGF family. *J Biol Chem*, 281, 15694-700. ↗

Editions

2007-01-10	Authored	de Bono, B.
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