

## Free fatty acid receptors (version 2019.4) in the IUPHAR/BPS Guide to Pharmacology Database

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### Abstract

Free fatty acid receptors (FFA, **nomenclature as agreed by the NC-IUPHAR Subcommittee on free fatty acid receptors [111, 24]**) are activated by free fatty acids. Long-chain saturated and unsaturated fatty acids (including C14:0 ([myristic acid](#)), C16:0 ([palmitic acid](#)), C18:1 ([oleic acid](#)), C18:2 ([linoleic acid](#)), C18:3, ([α-linolenic acid](#)), C20:4 ([arachidonic acid](#)), C20:5,n-3 ([EPA](#)) and C22:6,n-3 ([docosahexaenoic acid](#))) activate FFA1 [8, 50, 60] and FFA4 receptors [41, 48, 90], while short chain fatty acids (C2 ([acetic acid](#)), C3 ([propanoic acid](#)), C4 ([butyric acid](#)) and C5 ([pentanoic acid](#))) activate FFA2 [9, 62, 86] and FFA3 [9, 62] receptors. The crystal structure for agonist bound FFA1 has been described [108].

### Contents

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### Database links

## Free fatty acid receptors

<http://www.guidetopharmacology.org/GRAC/FamilyDisplayForward?familyId=24>

### Introduction to Free fatty acid receptors

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#### Receptors

##### FFA1 receptor

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##### FFA2 receptor

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##### FFA3 receptor

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##### FFA4 receptor

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##### GPR42

<http://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=228>

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