

| Receptor | Mutation | Effect | Citation |
|--------------------|----------|---|---|
| Human ER α | A350F | Constitutive activity | Chen et al., J. Biol. Chem. 276:28645, 2001 |
| Human ER α | E380Q | Constitutive activity | Lazennec G, et al., Mol. Endo. 11:1375, 1997 |
| Human ER α | L536A | Constitutive activity | Zhao et al., J. Biol. Chem. 278:27278, 2003 |
| Human ER α | L536E | Constitutive activity | Zhao et al., J. Biol. Chem. 278:27278, 2003 |
| Human ER α | L536G | Constitutive activity | Zhao et al., J. Biol. Chem. 278:27278, 2003 |
| Human ER α | L536K | Constitutive activity | Zhao et al., J. Biol. Chem. 278:27278, 2003 |
| Human ER α | L536N | Constitutive activity | Zhao et al., J. Biol. Chem. 278:27278, 2003 |
| Human ER α | Y537A | Constitutive activity | Weis et al., Mol. Endo. 10:1388, 1996 |
| Human ER α | Y537N | Constitutive activity | Zhong and Skafar, Biochemistry 41:4209, 2002 |
| Human ER α | Y537S | Constitutive activity | Weis et al., Mol. Endo. 10:1388, 1996 |
| Human ER α | Y541A | Constitutive activity | White et al., EMBO J., 16:1427, 1997 |
| Human ER α | Y541D | Constitutive activity | White et al., EMBO J., 16:1427, 1997 |
| Human ER α | Y541E | Constitutive activity | White et al., EMBO J., 16:1427, 1997 |
| Human PR | M759A | Constitutive activity | Zhang et al., PNAS 102:2707, 2005 |
| Human PR | M759L | Constitutive activity | Zhang et al., PNAS 102:2707, 2005 |
| Human PXR | H407A | Constitutive activity | Ostberg et al., Eur. J. Biochem. 269:4896, 2002 |
| Human RAR α | A392R | Constitutive activity | Benko et al., J. Biol. Chem. 278:43797, 2003 |
| Mouse RXR α | F318A | Constitutive activity | Vivat et al., EMBO J 16:5697, 1997 |
| Mouse RXR α | F318L | Constitutive activity | Vivat et al., EMBO J 16:5697, 1997 |
| Mouse RXR α | F318V | Constitutive activity | Vivat et al., EMBO J 16:5697, 1997 |
| Human ERR α | F329A | Reduced constitutive activity; receptor becomes ligand-activated by antagonists of wild-type receptor, but at levels below that of wild-type baseline | Chen et al., J. Biol. Chem. 276:28645, 2001 |
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Table S2. Nuclear receptor mutations that cause constitutive activity in liganded receptors or ligand-activation in constitutive receptors without activating ligands. Mutations were identified by querying the Nuclear Receptors Mutations Database as www.receptors.org and by literature searches and verified by consulting the primary publication.