



## Nuclear Receptor Assay Services for Drug Discovery

### Cellular Assays

The following list of Gal4-reporter assays (so-called "Mammalian-1-Hybrid" or "Mammalian-2-Hybrid" assays) can be employed for general or selectivity screening purposes.

Nuclear Receptor Trivial Name	Nuclear Receptor Systematic Name	Species	Reference Compound
TR $\alpha$	NR1A1	H. sapiens	Triiodothyronine (T3)
TR $\beta$	NR1A2	H. sapiens	Triiodothyronine (T3)
RAR $\alpha$	NR1B1	H. sapiens	TTNPB
RAR $\alpha$ (rat)	NR1B1	R. norvegicus	TTNPB
RAR $\beta$	NR1B2	H. sapiens	TTNPB
RAR $\beta$ (rat)	NR1B2	R. norvegicus	TTNPB
RAR $\gamma$	NR1B3	H. sapiens	TTNPB
RAR $\gamma$ (rat)	NR1B3	R. norvegicus	TTNPB
PPAR $\alpha$	NR1C1	H. sapiens	GW7647
PPAR $\alpha$ (mouse)	NR1C1	M. musculus	GW7647
PPAR $\alpha$ (rat)	NR1C1	R. norvegicus	GW7647
PPAR $\beta/\delta$	NR1C2	H. sapiens	GW501516
PPAR $\beta/\delta$ (mouse)	NR1C2	M. musculus	GW501516
PPAR $\beta/\delta$ (rat)	NR1C2	R. norvegicus	GW501516
PPAR $\gamma$	NR1C3	H. sapiens	Rosiglitazone (RGZ)
PPAR $\gamma$ (mouse/rat)	NR1C3	M. musculus/R. norvegicus	Rosiglitazone (RGZ)
ROR $\alpha$	NR1F1	H. sapiens	ATRA
ROR $\alpha$ (mouse)	NR1F1	M. musculus	ATRA
ROR $\beta$	NR1F2	H. sapiens	ATRA
ROR $\beta$ (mouse)	NR1F2	M. musculus	ATRA
ROR $\gamma$	NR1F3	H. sapiens	T0901317
ROR $\gamma$ t	NR1F3	H. sapiens	T0901317
ROR $\gamma$ (mouse)	NR1F3	M. musculus	T0901317
LXR $\alpha$	NR1H2	H. sapiens	T0901317
LXR $\alpha$ (mouse)	NR1H2	M. musculus	T0901317
LXR $\beta$	NR1H3	H. sapiens	T0901317
LXR $\beta$ (mouse)	NR1H3	M. musculus	T0901317
FXR	NR1H4	H. sapiens	GW4064
FXR (mouse)	NR1H4	M. musculus	GW4064
FXR (rat)	NR1H4	R. norvegicus	GW4064
VDR	NR1I1	H. sapiens	1,25-Dihydroxycholecalciferol (VitD3)
PXR	NR1I2	H. sapiens	SR12813
PXR (mouse)	NR1I2	M. musculus	Pregnenolone-16 $\alpha$ -carbonitrile (PCN)
PXR (rat)	NR1I2	R. norvegicus	Pregnenolone-16 $\alpha$ -carbonitrile (PCN)
CAR	NR1I3	H. sapiens	CITCO
CAR (mouse)	NR1I3	M. musculus	TCPOBOP
CAR (rat)	NR1I3	R. norvegicus	Clotrimazole (Clot)
HNF4 $\alpha$	NR2A1	H. sapiens	orphan, constitutively active
HNF4 $\gamma$	NR2A3	H. sapiens	orphan, constitutively active
RXR $\alpha$	NR2B1	H. sapiens	9-cis-Retinoic Acid (9cisRA)
RXR $\beta$	NR2B2	H. sapiens	9-cis-Retinoic Acid (9cisRA)
RXR $\gamma$	NR2B3	H. sapiens	9-cis-Retinoic Acid (9cisRA)
ER $\alpha$	NR3A1	H. sapiens	17 $\beta$ -Estradiol (b-Est)
ER $\beta$	NR3A2	H. sapiens	17 $\beta$ -Estradiol (b-Est)
ERR $\alpha$	NR3B1	H. sapiens	Diethylstilbestrol (DES)
ERR $\beta$	NR3B2	H. sapiens	published tool cpd (DY131)
ERR $\gamma$	NR3B3	H. sapiens	4-OH Tamoxifen (OHT)
GR	NR3C1	H. sapiens	Dexamethasone (DEX)
MR	NR3C2	H. sapiens	Aldosterone (Ald)
PR	NR3C3	H. sapiens	Progesterone (Prog)
AR	NR3C4	H. sapiens	Dihydrotestosterone (DHT)
SF1	NR5A1	H. sapiens	orphan, constitutively active
LRH1	NR5A2	H. sapiens	orphan, constitutively active