

ARG42858 anti-NR1D1 antibody

Package: 100 μl Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes NR1D1
Tested Reactivity	Hu, Ms, Rat
Tested Application	FACS, ICC/IF, IHC-P
Host	Rabbit
Clonality	Polyclonal
Isotype	lgG
Target Name	NR1D1
Species	Human
Immunogen	Synthetic peptide derived from Human NR1D1.
Conjugation	Un-conjugated
Alternate Names	hRev; Rev-erbA-alpha; THRAL; V-erbA-related protein 1; THRA1; EAR-1; Nuclear receptor subfamily 1 group D member 1; ear-1; EAR1

Application Instructions

Application table	Application	Dilution
	FACS	1:20
	ICC/IF	1:50 - 1:200
	IHC-P	1:50 - 1:200
Application Note	* The dilutions indicate recomme	ended starting dilutions and the optimal dilutions or concentrations

should be determined by the scientist.

Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.4), 150 mM NaCl, 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	NR1D1
Gene Full Name	nuclear receptor subfamily 1, group D, member 1
Background	This gene encodes a transcription factor that is a member of the nuclear receptor subfamily 1. The encoded protein is a ligand-sensitive transcription factor that negatively regulates the expression of core clock proteins. In particular this protein represses the circadian clock transcription factor aryl hydrocarbon receptor nuclear translocator-like protein 1 (ARNTL). This protein may also be involved in regulating genes that function in metabolic, inflammatory and cardiovascular processes. [provided by RefSeq, Jan 2013]
Function	Transcriptional repressor which coordinates circadian rhythm and metabolic pathways in a heme- dependent manner. Integral component of the complex transcription machinery that governs circadian rhythmicity and forms a critical negative limb of the circadian clock by directly repressing the expression of core clock components ARTNL/BMALL CLOCK and CRY1. Also regulates genes involved in metabolic functions, including lipid and bile acid metabolism, adipogenesis, gluconeogenesis and the macrophage inflammatory response. Acts as a receptor for heme which stimulates its interaction with the NCOR1/HDAC3 corepressor complex, enhancing transcriptional repression. Recognizes two classes of DNA response elements within the promoter of its target genes and can bind to DNA as either monomers or homodimers, depending on the nature of the response element. Binds as a monomer to a response element composed of the consensus half-site motif 5'-[A/G]GGTCA-3' preceded by an A/T- rich 5' sequence (RevRE), or as a homodimer to a direct repeat of the core motif spaced by two nucleotides (RevDR-2). Acts as a potent competitive repressor of ROR alpha (RORA) function and regulates the levels of its ligand heme by repressing the expression of APOC3 and by influencing the activity of sterol response element binding proteins (SREBPs); represses INSIG2 which interferes with the proteolytic activation of SREBP swhich in turn govern the rhythmic expression of GePC and PEPCK and adipocyte differentiation via repression of PARG. Regulates glucose-induced insulin secretion and expression and faxty acid synthesis. Regulates glucose-induced insulin secretion and expressions and faxty acid synthesis. Regulates calls. Positively regulates bile acid synthesis by increasing hepatic expression of CYP7A1 via repression of NR0B2 and NFIL3 which are negative regulators of CYP7A1. Modulates skeletal muscle oxidative capacity by regulating mitochondrial biogenesis and taxphagy; controls mitochondrial biogenesis and respiration by interfe
Calculated Mw	67 kDa
PTM	Ubiquitinated, leading to its proteasomal degradation. [UniProt]
Cellular Localization	Nucleus. Cytoplasm. Cell projection, dendrite. Cell projection, dendritic spine. Note=Localizes to the cytoplasm, dendrites and dendritic spine in the presence of OPHN1. [UniProt]