

Cat No: Kab05833

Product Particulars: anti-NR1D2-antibody

Pack Size: 100µg

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Purify: Immunogen affinity purified

Host: Rabbit

Isotype: IgG

Storage: PBS with 0.02% sodium azide and 50% glycerol pH 7.3 , -20°C for 24 months (Avoid repeated freeze / thaw cycles.)

Background (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 ARNTL/BMAL1 and CLOCK. Also regulates genes involved in metabolic functions, including lipid metabolism and the 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 also negatively regulates the expression of NR1D1. Regulates lipid and energy homeostasis in the skeletal muscle via repression of genes involved in lipid metabolism and myogenesis including: CD36, FABP3, FABP4, UCP3, SCD1 and MSTN. Regulates hepatic lipid metabolism via the repression of APOC3. Represses gene expression at a distance in macrophages by inhibiting the transcription of enhancer-derived RNAs (eRNAs). In addition to its activity as a repressor, can also act as a transcriptional activator. Acts as a transcriptional activator of the sterol regulatory element-binding protein 1 (SREBF1) and the inflammatory mediator interleukin-6 (IL6) in the skeletal muscle.

Immunogen: nuclear receptor subfamily 1, group D, member 2

Synonyms:

Calculated MW:

Uniprot ID: Q14995

Specificity: Human, Mouse, Rat

Tested Application: ELISA, WB

Recommended Dilution:

Gene ID: 9975

Gene Location: