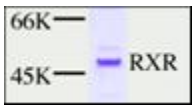
6931 Arlington Road
Suite T100
Bethesda, MD 20814
www.ProteinOne.com

RXRα (Retinoid X Receptor, alpha)

Catalog Reference	Vial Size		Lot Number	Molecular Mass	Accession
P1022-01	10,000 units (ng)	☐	082605G	48 kDa	NM_002957
P1022-02	25,000 units (ng)	☐			

Storage conditions:
Store at -80 °C

Description:
Nuclear receptors form the largest known family of transcription factors and have a crucial role in nearly all aspects of vertebrate development and adult physiology by transducing the effects of hormones into transcriptional responses (1). The family is defined by two domains: (a) the central, highly conserved, DNA-binding domain (DBD) of approx. 66 amino acids, and (b) the C-terminal, structurally conserved, ligand-binding domain (LBD) of approx. 250 amino acids (2, 3). In addition to binding to DNA and activating transcription in response to 9-cis retinoic acid, RXR forms heterodimers with the receptors for thyroid hormone (TR), retinoic acid (RAR), vitamin D (VDR), prostanoids (PEAR), and numerous orphan receptors (4). RXR acts as both activator and repressor of transcription (5). In the absence of hormone, RXR (homo- or heterodimer) interacts with SMRT (silencing mediator for retinoid and thyroid hormone receptors) and N-CoR (nuclear receptor corepressor) and represses transcription through recruitment of histone deacetylases (6, 7). In the presence of hormone, RXR interacts with a number of activators including the SRC-1 family (8), CBP/p300 (9), pCAF (10) and the TRAP complex (11) to target chromatin acetylation and activation of transcription (12).



Source:
Recombinant His tagged RXR is isolated from an E. coli strain that carries the coding sequence of the human protein under the control of a T7 promoter.

Applications:
RXR can be applied in reconstituted in vitro transcription and protein-protein interaction assays. **For Research Use Only.**

Quality Control:
Protein is greater than 95% homogeneous based on SDS-PAGE analysis.

Unit Definition:
1 unit equals 1 nanogram of purified protein. 20 units are sufficient for reconstituted transcription assay and 100 units are sufficient for a protein-protein interaction assay.

Concentration:
0.5 mg/ml (in 1x dilution buffer A)

Reagents Supplied:
1x dilution buffer A: 20 mM Tris-Cl (pH 8.0), 20% Glycerol, 100 mM KCl, 1 mM DTT and 0.2 mM EDTA

References:
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