



**Product** Data Sheet

# **Screening Libraries**

**Proteins** 

# **PXR Protein, Human (His)**

Cat. No.: HY-P701397

Synonyms: NR112; Nuclear receptor subfamily 1 group I member 2; Orphan nuclear receptor PAR1; Orphan

nuclear receptor PXR; Pregnane X receptor; Steroid and xenobiotic receptor; SXR

Species: Human Source: E. coli

O75469 (S130-S434) Accession:

Gene ID: 8856 Molecular Weight: 39.8 kDa

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Appearance	Solution.
Formulation	Supplied as a 0.2 μm filtered solution of 50 mM HEPES, 200 mM NaCl, 20% glycerol, pH 7.5, 1 mM DTT.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconsititution	Please use rapid thawing with running water to thaw the protein.
Storage & Stability	Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.
Shipping	Shipping with dry ice.

# **DESCRIPTION**

## Background

PXR Protein, a nuclear receptor, serves as a versatile transcription factor activated by a range of endogenous and xenobiotic compounds. It plays a pivotal role in regulating the transcription of multiple genes involved in the metabolism and secretion of potentially harmful substances, including xenobiotics, drugs, and endogenous compounds. Activated by various ligands such as the antibiotic rifampicin, as well as plant metabolites like hyperforin, guggulipid, colupulone, and isoflavones, the response to specific ligands is species-specific. PXR is also activated by naturally occurring steroids, including pregnenolone and progesterone. It binds to response elements in the promoters of key genes such as CYP3A4 and ABCB1/MDR1. Operating in association with RXR, PXR forms heterodimers and interacts with coactivator NCOA1. Moreover, PXR engages in liganddependent interactions with the clock proteins CRY1 and CRY2 through its NR LBD domain, adding another layer of complexity to its regulatory functions.

Caution: Product has not been fully validated for medical applications. For research use only.

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