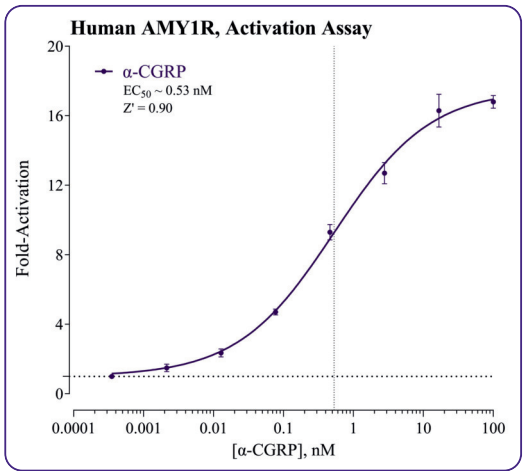
Amylin Receptor Assays

INDIGO's assays targeting the Amylin Receptors enable precise and reliable characterization of both activators and inhibitors, delivering high reproducibility with minimal lot-to-lot variability. Built on robust assay design, these platforms generate consistent, high-quality data that supports confident decision-making throughout discovery and optimization.

INDIGO assay workflows enable rapid screening of activators and inhibitors, providing actionable results in as little as 24 hours to accelerate lead identification and streamline drug development timelines, while seamlessly integrating into existing screening pipelines.

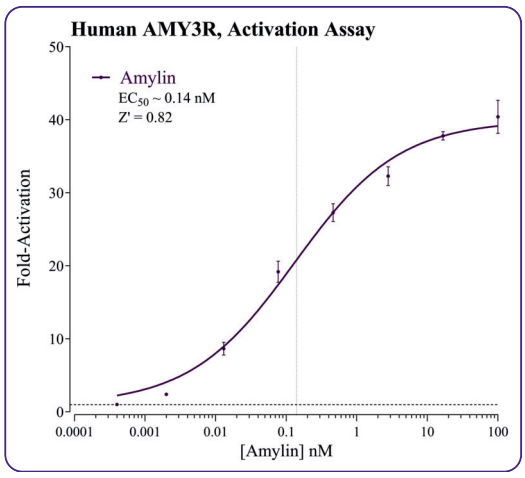
Amylin 1 Reporter Assay



	INDIGO Biosciences	COMPANY A	COMPANY B	COMPANY C
EC50				
Assay Type				

IB4810 **Human AMY1R Reporter Assay Kit**

Amylin 3 Reporter Assay



	INDIGO Biosciences	COMPANY A	COMPANY B	COMPANY C
EC50	0.14	164	6.6	7.45
Assay Type	CRE (Gs/cAMP/ CREB)	β-Arrestin	cAMP	CRE

IB4800 **Human AMY3R Reporter Assay Kit**

Want to learn more about our Amylin Receptor assays? Scan here for more information!

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Background

The Amylin receptors (AMY1-3R) are Class B G-protein coupled receptors formed by the heterodimerization of the calcitonin receptor (CTR) and one of the three Receptor Activity Modifying Proteins (RAMP1-3).

These receptors have been identified as important drug targets due to their critical involvement in both metabolic control (e.g., energy balance and glucose homeostasis) and cognitive/neuroprotective effects.

The Amylin Receptor is activated by the hormone amylin, also known as Islet Amyloid Polypeptide (IAPP), and is crucial for metabolic and cognitive health. Activation of the Amylin Receptor helps control key metabolic processes like gastric emptying, food intake, and postprandial glucose levels.

The Assay System

INDIGO's Reporter Cells contains an engineered luciferase reporter gene functionally linked to tandem Cyclic AMP Response Elements (CRE) and a minimal promoter. Activated adenylate cyclase results in the production of cAMP, which binds the transcription factor CREB (cAMP Response Element-Binding Protein). Activated CREB binds to CRE sequences, seeding the formation of a complete transcription complex that drives luciferase gene expression.

Quantifying relative changes in luciferase enzyme activity in the treated reporter cells relative to the untreated reporter cells provides a sensitive surrogate measure of drug-induced changes in Amylin receptor activity. Accordingly, the principal application of this reporter assay is in the screening of test compounds to quantify any functional activities, either activating or inhibitory, that they may exert against the Amylin Receptors.

Related Assays

IB4800 **Human AMY3R Reporter Assay Kit**

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