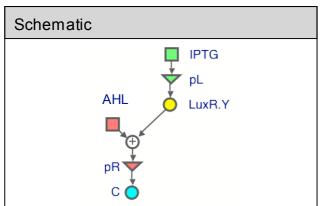
[Rec-LRY.RC] Open-Loop AHL Receiver Device

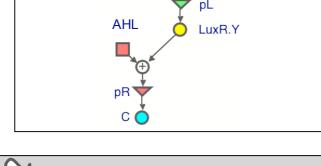
Author: Mukund Thattai (thattai@ncbs.res.in)

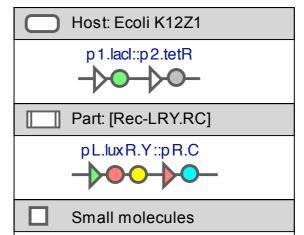


Characteristics

Expression of LuxR and YFP from pL has been separately characterized (see data for [Trc-LRY]).

Reponse of the promoter pR can be characterized only in conjunction with a source of AHL (see data for [Sen-TIC+Rec-LRY.RC]).





Date: October 16th, 2007

- •IPTG: Isopropyl β-D-1-thiogalactopyranoside.
- •AHL: acyl homoserine lactone.

Promoters

- •p1: Constitutive Laclq promoter.
- •p2: Constitutive N25 promoter.
- •pL: Lac promoter.
- •pR: V. fischeri LuxpR promoter.

Proteins

- •LacI: Lac repressor, negative regulator of pL.
- •TetR: Tet repressor, negative regulator of pT.
- •LuxR: V. fischeri LuxR protein, positive regulator of pR.
- •C: Cyan fluorescent protein
- •Y: Yellow fluorescent protein

Description

IPTG drives the expression of the LuxR protein (monitored using polycistronic YFP). LuxR, when bound to externally supplied AHL, drives the expression of CFP.

Usage and compatibility

This device must be used in conjunction with an AHL sender device. It has been tested with [Sen-TIC].



Measurements and analysis were carried out by members of the NCBS iGEM 2007 team: Kiran, Krishna, Mukund, Navneet, Nilesh, Senthil, Shashanka, Sugat, Sushant, Varun, Vini,

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