Cella Technologies

yeast two-hybrid system services

Protein–Protein Interaction Testing Service (CT-100) - Service Description

Name of the service

Protein–protein interaction testing service

Short Description

Attempting to show/confirm binding between two proteins/protein fragments of interest in the yeast two-hybrid system/assay(1), Cella Technologies (Cat No CT-100).

Detailed Description

Provider

Cella Technologies is specialized in developing yeast two-hybrid system assays(1) that can be used to attempt to confirm protein–protein interactions (PPIs) / identify protein–protein interaction domains (PPIDs) experimentally. We use our expertise in PPID mapping to identify peptide protein–protein interaction inhibitor candidates(1) for clients from academia and industry worldwide. For our customers, we also design and construct peptide-encoding plasmids(1), molecular tool candidates that can be tested in cell culture research directly.

Background

We have extensive experience in successfully confirming protein–protein interactions and mapping protein–protein interaction domains with the yeast two-hybrid system(1), which is a well-known technology to study protein–protein interactions. Due to our skills, expertise and highly efficient workflows we can deliver high-quality work at competitive prices.

Service Details

This service can be used to attempt to experimentally confirm putative/potential protein–protein interactions that were identified using affinity purification-mass spectrometry (AP-MS) or any other method to identify PPIs, including PPI prediction methods. In a PPI confirmation project, assays as indicated in Table 1 will be conducted; fictional PRTN1(1-500)–PRTN2(1-600) interaction is used to illustrate the service (all hypothetically). If Assay 1a turns out positive and (control) Assays 1b and 1c turn out negative (Table 1), then it can be said that PRTN1(1-500) significantly binds to PRTN2(1-600) (directly and or indirectly)—for explanation, please see the Yeast two-hybrid (Y2H) system- and Protein–protein interaction testing in the yeast two-hybrid assay-pages on our website(1).

Table 1. Testing PRTN1–PRTN2 interaction experimentally.

Assay	Bait	Prey	Reporter Activity
1a	PRTN1(1-500)	PRTN2(1-600)	to be determined
1b	PRTN1(1-500)	-	to be determined
1c	-	PRTN2(1-600)	to be determined

In Protein–Protein Interaction Testing projects, we will use a state-of-the-art version of the classic yeast two-hybrid system.

This service (Cat No CT-100) includes:

- Designing and constructing the bait-encoding/prey-encoding plasmid; verifying constructed plasmids through restriction enzyme analysis; verifying the cloned bait/prey fragment through DNA sequencing.
- Generating strains for use in the bait–prey interaction/prey-dependency/bait-dependency (control) assays; and measuring the activity of one or more reporters in the cells of the generated strains.
- Storage of plasmids; project plasmids will be stored for at least a specified period of time, or, if preferred, they will be destroyed; transferring them to you may be possible, contact us to learn more.

Deliverables
After completion of the project, the customer will receive (i) a report which clearly describes the project and its outcome; (ii) the DNA sequence chromatogram trace files; and, if applicable, (iii) the constructed bait-encoding/prey-encoding plasmid(s).

Sample Submission
Plasmid template DNA encoding the protein(s) of interest has to be provided, you will receive shipping instructions; please contact us for advice in case you don't have that DNA available.

Prices

Prices depend on several factors, for details please refer to the Price Information document, which can be obtained through our website(1).

Quotation requests

To get a(n) estimate/quote (possible in several currencies) for your specific project, please contact us

through the Scientist.com platform[2] or contact us directly. In a quotation request you can choose (especially when it comes to information that is not yet in the public domain) to indicate the proteins of the concerning PPI(s) as done in Assay 1a (see above), thus use PRTN1(...-...), PRTN2(...-...), PRTN3(...-…), and so on, and do not mention real protein names/symbols. Mentioning the bait–prey interaction(s) to be assayed is sufficient; control assays will be suggested by us where necessary. Please note: currently, our services can be purchased only through the Scientist.com platform[2].

Turnaround times

Please contact us for turnaround times.

Keywords

yeast two-hybrid system, protein–protein interaction (PPI) confirmation/domain mapping/inhibition, binding site, minimal interacting domain, peptide protein–protein interaction inhibitor

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For the latest version of this Service Description (SD) document, please refer to our website[1].

Footnotes

1. For references and additional (including legal, order, price and technical) information, please refer to our website at https://cellatechnologies.com or contact us.
2. https://app.scientist.com/providers/cella-technologies.

Please note, some PDF-readers have difficulties with URLs, if clicking on an underlined URL results in an error message in your web browser, then please complete the URL in the URL bar of your web browser through copy-paste or by typing.

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