

easyEST™ Embryonic Stem-Cell Test Service

The first automated EST as a convenient and affordable service offer

- Only small amounts of your valuable compounds required
- Secure protocol parallels ECVAM Invitox 113
- Alternative endpoints possible (e.g. RNA expression)

Upscale your embryonic stem-cell test programs

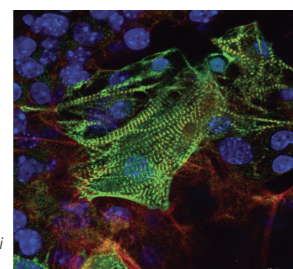
The embryonic stem-cell test (EST) is a powerful method to assess the effects of any new compound on cell differentiation and viability. Introduced in 1997, the EST quickly became recognized as the best available method for embryotoxicity testing that avoids the use of animals.

However, the classical EST protocol (ECVAM Invitox 113) is laborious and complex, which has significantly hampered its adoption. The patented GravityPLUS technology, implemented at InSphero on our robotic platform, irons out the practical issues with the classical EST protocol.

This method is now offered as the easyEST™ Embryonic

The classical EST protocol is outlined in: Andrea E M Seiler & Horst Spielmann „The validated embryonic stem cell test to predict embryotoxicity in vitro“ Nat Protocols, 6:961-78, 2011.

Stem Cell Test Service. InSphero's experienced scientific team will test your compounds and rapidly return an easy-to-understand final report. By outsourcing your EST testing to InSphero you'll not only gain important information on your new compounds: InSphero can offer this service at a fraction of classical EST testing cost – in a range similar to standard toxicology testing.



Confocal image of mouse ES cells derived cardiomyocytes. Sarcomeric alpha-actinin (green) actin cytoskeleton (red) and nuclei (blue). Scale bar 15 µm.

What makes easyEST™ so efficient?

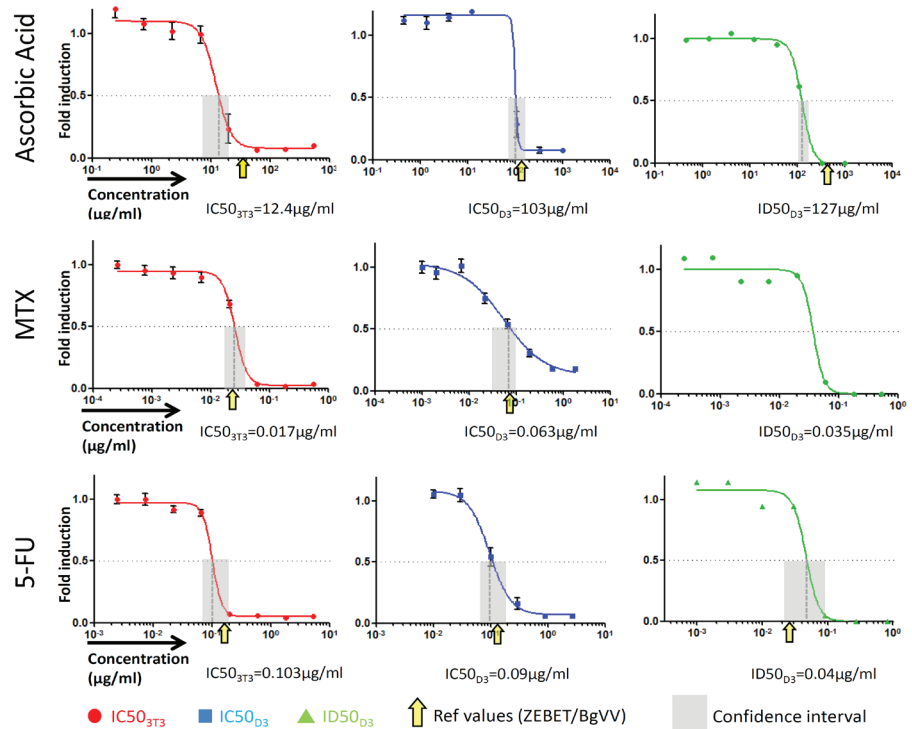
The petri-dish hanging-drop method used in the classical EST protocol requires substantial hands-on work making the process expensive. The easyEST™ service gives you access to a breakthrough in efficiency and scalability:

- Excellent size uniformity of embryoid bodies (<5%) for better differentiation efficiency
- Consumes less than 50 mg of your valuable compounds
- Automated and efficient EB generation and medium change
- Direct, automated transfer into flat-bottom adherent plate

All relevant aspects of the Invitox 113 protocol remain unchanged to allow for a straightforward migration to the easyEST™ service.

How do I take this forward?

1. Tell us how many compounds you want to test:
 4, 8, 16 or more (these will need to be sent to us in solution in your desired concentration after you place your order)
2. InSphero will test as follows using automated GravityPLUS™:
 - Compatibility of compounds with assay
 - Range finding (n=6) for both ID50 and IC50
 - Embryonic stem-cell testing
3. You receive:
 - A summary report including IC50 data for 3T3 and ESD3 cells (n=6) and ID50 data for ESD3 cells (n=24)



- Embryotoxic classification with linear discriminants according to ECVAM INVITOX protocol No.113
- A web-based presentation and discussion

Ordering information

Catalog #	Description
SP-03-001-00	EasyEST™ Embryonic Stem-Cell Test Service Pack – 4 compounds
SP-03-002-00	EasyEST™ Embryonic Stem-Cell Test Service Pack – 8 compounds
SP-03-003-00	EasyEST™ Embryonic Stem-Cell Test Service Pack – 16 compounds

Please inquire for different numbers of compounds. Volume discounts for larger testing programs are available.

For pricing and details, please visit us at www.insphero.com/services or contact our local branch offices and authorized distributors.



QR Code

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