

## APPLICATION NOTES

Product: HuSu-TRANSCHYMAL- DP

### HUMAN PROGENITOR CELLULAR PLATFORM – A TOOL TO HUMANIZE 3D BIOPRINTS & IMPLANTS

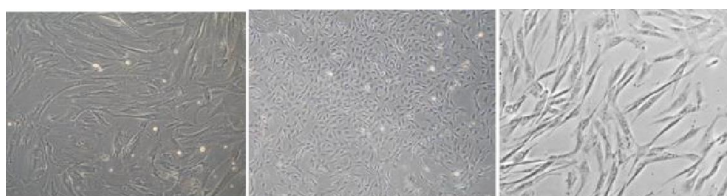
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#### Product Description:

TRANSCHYMAL-DP is an *invitro* human sourced progenitor cell based platform composed of undifferentiated cells with self-renewing capabilities. Each unit is negative for HIV-1, HBV, HCV, Mycoplasma, Bacteria, Yeast and Fungi.

Available in frozen condition. Ready to use with customized yield per vial.

Phenotypically identifiable TRANSCHYMAL platform:



Transchymal-UC    Transchymal-AD    Transchymal-DP

Source: Milk or wisdom teeth; Demonstrated phenotypic and functional similarities with that of bone marrow-derived mesenchymal stem cells. Transchymal-DP differentiates to Chondrogenic, Osteogenic, Adipogenic and Neural lineages and are guaranteed through 10 population doublings expressing CD105, CD166, CD29, CD90, and CD73, and negative for CD34, CD45 CD133.

#### Biocompatibility:

Material	Tested to be biocompatible, supporting proliferation of
Collagen	Transchymal-UC, Transchymal-DP, Transchymal-AD
Matrigel	Transchymal-UC, Transchymal-DP, Transchymal-AD
Hyaluronic acid (HLA)	Transchymal-UC, Transchymal-DP
Laminin	Transchymal-UC
Fibrin	Transchymal-UC, Transchymal-DP, Transchymal-AD
Poly-lactic acid (PLA)	Transchymal-UC, Transchymal-DP
Poly-glycolic acid (PGA)	Transchymal-UC, Transchymal-DP, Transchymal-AD
Human Amniotic Membrane (HAM)	Transchymal-UC, Transchymal-DP, Transchymal-AD
Titanium	Transchymal-UC, Transchymal-DP
Zirconium	Transchymal-UC, Transchymal-DP
Titanium alloy	Transchymal-UC

**Recommendation:**

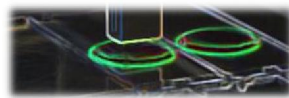
For Implant-Stem cell Biocomplex models

**Advantages:** Ready to use; No culturing procedure involved to use; No further expansion or passage to use; Read outs can be at cellular, molecular and protein levels mimicking human physiological milieu in the scaffold used

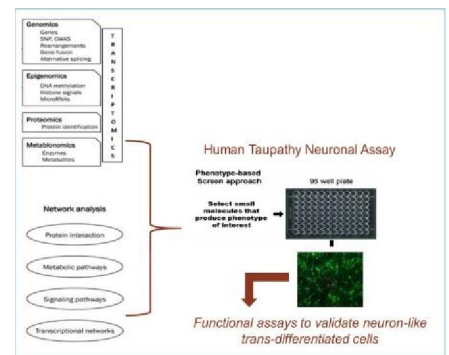
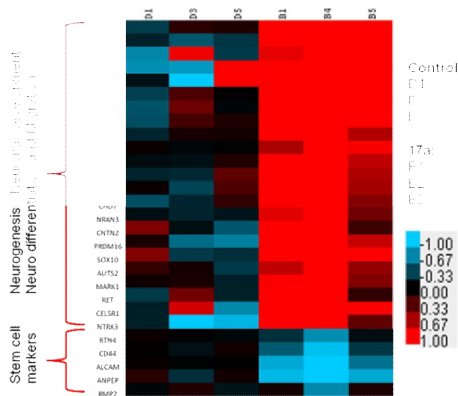
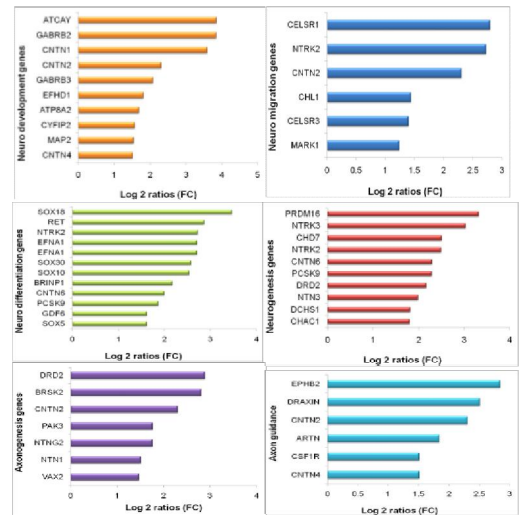
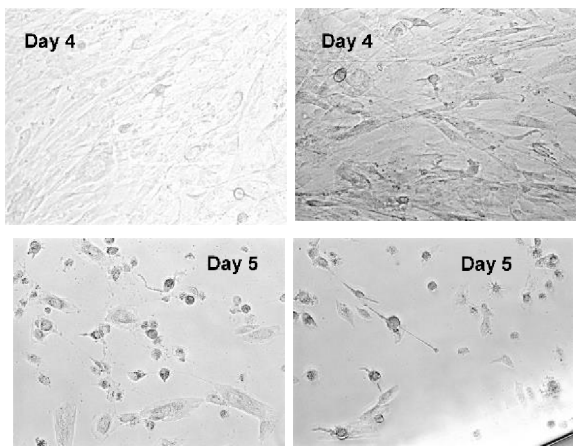
**Benefits:** Best suited as the invitro platform available in abundance, amicable to be modelled to perform exploratory preclinical assays at large scale

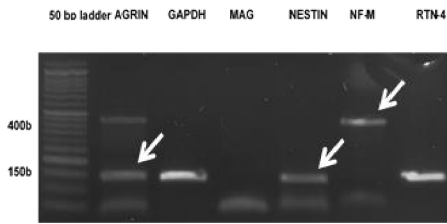
**TRANSCHYMAL for:**

Screening, Invitro tests on 3D model-Pre-clinical research models, Toxicity testing screens

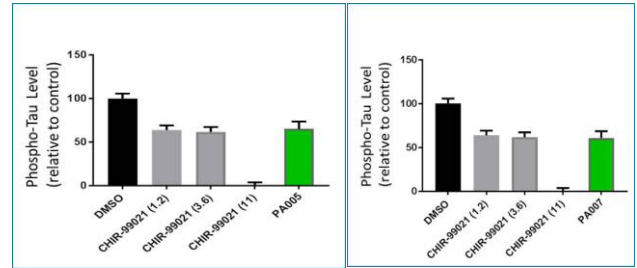


**Test Compound screened on Transchymal-DP**





Exhibiting: Neuronal Affinity



Affecting: Neuronal Developmental Pathways

## Highlighted Features

- Function based
- Unbiased
- Disruptive
- Scope for Multiple targets identification
- Effective
- Selective
- Phenotype specific
- Human relevant
- Cost Effective
- Invitro platform