

# Clonexpress, Inc.

---

504 E.Diamond Ave, Suite G  
Gaithersburg, MD 20877

PH: 301-869-0840

Fax: 301-963-4214

[www.clonexpress.com](http://www.clonexpress.com)

**Patient-specific pancreatic beta cells are generated by fusion of functionally enucleated cytoplasmic donor pancreatic beta cell lines with valproic acid treated fibroblasts and/or PBMNC obtained from human patients. These patient-specific epigenetically induced beta (EIB) cells express many functions characteristic of primary pancreatic beta cells. EIB cells secrete insulin in response to increasing concentration of glucose and GLP-1 peptide. These cells also express other beta cell specific functions, such as GLUT-2 and pdx-1. This technology has been used to generate EIB cells using PBMNC from type 2 diabetic mellitus (T2DM) patients. EIB cells from T2DM patient PBMNC also secrete normal level of insulin. Our proprietary adult and fetal human pancreatic beta cell lines, and EIB cells derived from normal and T2DM patient PBMNC can be used to establish a high throughput screening platform for T2DM drug discovery. Patient specific EIB cells can potentially be a very attractive approach to completely cure both type 1 and type 2 diabetes by cell therapy applications.**