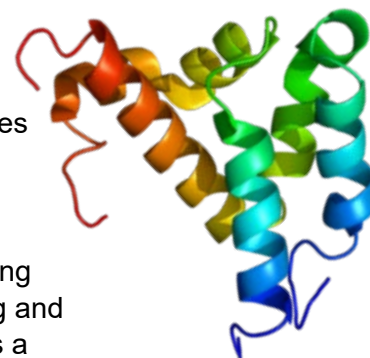


# Novel small molecule activators and inhibitors offer promising therapy potential in cardiac and cancer indications

The **steroid receptor coactivator-3 (SRC-3)** is a protein that is required for normal growth in animal cells. Upregulating and downregulating the production of this protein with small molecules can have different effects throughout the body. SRC-3 has been implicated in several diseases such as cancer, metabolic disorders, HIV, neurodegenerative disorders, heart disease, and/or inflammatory diseases.

- **Cardiac:** Studies have shown **increased production or activation** of SRC-3 promotes healing, and restoration of cardiac tissue after a heart attack. Upregulation of SRC-3 stimulates **regenerative activities in heart tissues**, increases cardioprotective metabolites, and prevents thickening of the heart muscle.
- **Cancer:** SRC-3 has been shown to be overexpressed and can modulate other signaling pathways resulting in increasing cell size and growth. As would be expected, targeting and **decreasing or inhibiting** SRC-3 expression has resulted in **smaller cell sizes** and is a novel approach in cancer therapeutics.

## SRC-3



### Small Molecule ACTIVATOR

**BLG#18-123**

*Potent, selective, **small molecule activator** of steroid receptor co-activators (SRC) as potential therapeutics for preservation, healing, and restoration of cardiac tissue after a heart attack*



Our **proprietary MCB-613** compound is **simpler** to manufacture and shown improved outcomes post heart attack in mouse models

- **Low toxicity** in mouse cells and whole animal
- Compound **ideally suited** for oral administration
- **Encourages tissue regeneration** through microvasculature growth



*Size reduction in heart enlargement for mice treated with MCB-613 versus the control group*

**INDICATIONS: Heart failure**

**\$22.1 Billion**

Market estimates for **heart disease and failure sector** by 2028

**655,000**

People die from **heart disease** in United States per year and is the #1 killer

Current treatment options for heart failure are surgery, vasodilators, water pills, heart transplant, or implantable devices. There is a **scarcity of assets** in the heart failure drug market with **heightened interest due to COVID**.

### Small Molecule INHIBITOR

**BLG#16-090**

*Potent, selective, **small molecule inhibitors** of steroid receptor co-activators (SRC) as potential therapeutics for different types of cancers*



Our **proprietary SI-12** compound is **simpler** and **less costly** to manufacture, distribute, store, and administer to patients

- **Selectively toxic** to cancer cells
- **Efficacy** in multiple *in vivo* cancer models
- **Targeted approach** of inhibiting SRC than chemotherapy



*On average, SI-12 treated mice saw tumor growth reduced by 70% compared to control*

**INDICATIONS: Breast/pancreatic**

**\$125 Billion**

Market for **oncology small molecule drugs** by 2026

**57,600**

People will be diagnosed with **pancreatic cancer** in US per year

Current treatment options for pancreatic and breast cancer are surgery, radiation therapy, chemotherapy, targeted therapy, and immunotherapy. There is a large **unmet need for cancer therapies** which have tolerable side effects and good efficacy.