

NC9 – Transglutaminase 2 Inhibitor small molecule (tool compound)

Catalogue number: 159669

Sub-type: Inhibitor

Images:

Contributor

Inventor: Jeffrey Keillor

Institute: University of Ottawa

Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: NC9 – Transglutaminase 2 Inhibitor small molecule (tool compound)

Alternate name: NC9

Class:

Conjugate:

Description: Transglutaminases are a family of enzymes that are responsible for mediating the formation of protein crosslinks of several diverse structural proteins (including fibronectin and collagen) through a transamidation reaction between peptide Gln and Lys residues. Tissue transglutaminase (TG2) is a member of this protein family, and is ubiquitously expressed in tissues, primarily found in the cytosol, but is also expressed in the nucleus, membranes, cell surface and extracellularly. TG2 is also...

Purpose: Inhibitor

Parental cell:

Organism:

Tissue:

Model:

Gender:

Isotype:

Reactivity:

Selectivity: TG2

Host:

Immunogen:

Immunogen UNIPROT ID:

Sequence:

Growth properties:

Production details:

Formulation:

Recommended controls:

Bacterial resistance:

Selectable markers:

Additional notes: NC9 also inhibits FXIIIa. Patent: US20190389814, PCT/IB2017/052162

Target details

Target:

Target alternate names:

Target background:

Molecular weight: 697.84

Ic50:

Applications

Application: Has been shown to block TG2 transamidation activity inside cancer stem cells (SCC13 cells) resulting in abolished transamidase activity. Inhibitor blocks EMT and kills cancer stem cells. In mesothelioma cancer stem cells, inhibition of TG2 reduces migration (invasion), and appears to increase markers of apoptosis.

Application notes:

Handling

Format:

Concentration:

Passage number:

Growth medium:

Temperature:

Atmosphere:

Volume:

Storage medium:

Storage buffer:

Storage conditions: Dry, dark and at 0 - 4° C for short term (days to weeks) or -20° C for long term (months to years). Aliquot to avoid freeze-thaw cycles. Lasts up to 2 years with proper storage

Shipping conditions: Dry Ice

Related tools

Related tools:

References

References:

CancerTools.org