Product Specification Sheet

Product Name: Leukadherin-1 (LA1)

Catalog Number: C5385-2 (powder)

C5385-2s (10mM in DMSO)

Package Size: 2 mg

Technical information:

Chemical Formula: C₂₂H₁₅NO₄S₂

CAS #: 344897-95-6

Molecular Weight: 421.49

Purity: >98%

Formulation: White solid

Solubility: Soluble in DMSO up to 50 mM

Chemical Name: (Z)-4-(5-((3-benzyl-4-oxo-2-thioxothiazolidin-5-ylidene)methyl)furan-2-

yl)benzoic acid

Storage: Store solid powder at 4°C desiccated;

Store DMSO solution at -20°C.

Handling: • For C5385-2 (powder), add 474 μL of DMSO to make 10 mM solution.

• For C5385-2s, before open the vial, centrifuge the vial at 500rpm x 1 min

in a 50 mL conical tube to ensure full sample recovery.

Biological Activity: Leukadherin-1 (LA1), a novel small molecule agonists of integrin

CD11b/CD18, can increase the extent of CD11b/CD18-dependent cell adhesion of transfected cells and of primary human and mouse neutrophils

(EC₅₀ = 4μ M in vitro), which resulted in decreased chemotaxis and

transendothelial migration. LA1 can also decrease leukocyte recruitment and reduced arterial narrowing after injury in rats. Moreover, compared to a known integrin antagonist, LA1 preserved kidney function better in a mouse model of experimental nephritis. It inhibited leukocyte recruitment by increasing leukocyte adhesion to the inflamed endothelium, which was

reversed with a blocking antibody.

Reference: 1. Dony Maiguel, et al. Small Molecule–Mediated Activation of the

 $Integrin\ CD11b/CD18\ Reduces\ Inflammatory\ Disease.\ Sci.\ Signal.,\ Vol.\ 4,$

Issue 189, p. ra57

2. Faridi MH et al. Identification of novel agonists of the integrin

CD11b/CD18. Bioorg Med Chem Lett. 2009; 19(24):6902-6.

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