

# **Data Sheet**

**Product Name:** Dabigatran etexilate (mesylate)

 Cat. No.:
 CS-1398

 CAS No.:
 872728-81-9

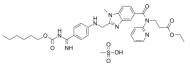
 Molecular Formula:
  $C_{35}H_{45}N_7O_8S$ 

Molecular Weight: 723.84

Target: Thrombin

Pathway: Metabolic Enzyme/Protease

**Solubility:** DMSO : 50 mg/mL (69.08 mM; Need ultrasonic)



#### **BIOLOGICAL ACTIVITY:**

Dabigatran etexilate mesylate (BIBR 1048MS) is an orally active prodrug of Dabigatran (a direct inhibitor of thrombin). Dabigatran etexilate mesylate has anticoagulant effects and is used for the prophylaxis of venousthromboembolism and stroke due to atrial fibrillation<sup>[1]</sup>. **In Vivo:** Dabigatran etexilate mesylate (BIBR 1048MS; oral; 10, 20 and 50 mg/kg for rats and 1, 2.5 and 5 mg/kg for monkeys) has dose- and time-dependent anticoagulant effects and has maximum effects between 30 and 120 min after administration, respectively<sup>[1]</sup>.

Dabigatran etexilate mesylate maximally and significantly prolongs partial thromboplastin time (aPTT) to 25.2, 38.4 and 78.3 s in 30 min after 10, 20 and 50 mg/kg oral doses, respectively<sup>[1]</sup>.

Dabigatran etexilate mesylate maximally prolongs the aPTT to 34.3 s, 44.0 s, and 63.0 s, respectively, 2h after 1, 2.5 or 5 mg/kg doses in the monkey<sup>[1]</sup>.

### References:

[1]. Wienen W, et al. In-vitro profile and ex-vivo anticoagulant activity of the direct thrombin inhibitor dabigatran and its orally active prodrug, dabigatran etexilate. Thromb Haemost. 2007 Jul;98(1):155-62.

[2]. Blair HA, Keating GM. Dabigatran Etexilate: A Review in Nonvalvular Atrial Fibrillation. Drugs. 2017;77(3):331-344.

## **CAIndexNames:**

β-Alanine, N-[[2-[[[4-[[[(hexyloxy)carbonyl]amino]iminomethyl]phenyl]amino]methyl]-1-methyl-1H-benzimidazol-5-yl]carbonyl]-N-2-pyridinyl-, ethyl ester, met hanesulfonate (1:1)

#### **SMILES:**

Caution: Product has not been fully validated for medical applications. For research use only.

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