

Echicetin

- Description:** Echicetin is a C-type lectin-like protein isolated from the venom of the saw-Scaled viper (*Echis carinatus*) acting as agonist/antagonist of platelet receptors. Echicetin may provide new insights into platelet function.
- Application:** Echicetin is a C-type lectin from *Echis carinatus* that binds to platelet glycoprotein Ib α and blocks von Willebrand factor and thrombin binding. It can be used either to block these GPIb α functions or, if labelled with 125 I or biotin or fluorescein isothiocyanate, to measure GPIb α expression levels. In the presence of plasma, echicetin agglutinates platelets via GPIb α and IgM and can be used to assess GPIb α expression levels directly, independently of von Willebrand factor levels or function.
- Origin:** *Echis carinatus* snake venom **MW:** 30 kDa (non-reduced)
14 and 16 kDa (reduced)
- Reconstitution** Dissolve vial in 0.5 ml dist. H₂O and make 100 μ l aliquots, freeze the ones not actively used and only store the aliquot at 4°C that is being actively used. For further dilution 10 mM Tris buffer pH 7,4 should be used.
- Storage:** May be used by the expiry date given on the label when stored unopened, protected from moisture, in the dark, 2°-8°C. Avoid contamination of the reagents by micro-organisms. Shipment of product does not require cooling during the time of transportation.
- References:** Navdaev, A., and Clemetson, K.J. GPIb cross-linking/ligation on echicetin-coated surfaces or echicetin/IgM κ in stirred suspension activates platelets by cytoskeleton modulated calcium release. *J. Biol. Chem.* 2002; 277: 45928-45934.
- Navdaev, A., Dormann, D., Clemetson, J.M., and Clemetson, K.J. Echicetin, a GPIb-binding snake C-type lectin from *Echis carinatus*, also contains a binding site for IgM κ , responsible for platelet agglutination in plasma and inducing signal transduction. *Blood*, 2001; 97: 2333-2341.
- Peng M, Emig FA, Mao A, Lu W, Kirby EP, Niewiarowski S. Kowalska MA. Interaction of echicetin with a high affinity thrombin binding site on platelet glycoprotein GPIb. *Thromb Haemost.* 1995;74: 954-957.
- Peng M, Holt JC, Niewiarowski S. Isolation, characterization and amino acid sequence of echicetin beta subunit, a specific inhibitor of von Willebrand factor and thrombin interaction with glycoprotein Ib. *Biochem Biophys Res Commun.* 1994;205: 68-72.

Package size: Vial containing 100 μ g

Code: 119-03

FOR RESEARCH USE ONLY. NOT FOR HUMAN USE OR DRUG USE.

