Recombinant Human Cyclophilin B

Catalog Number: B3002-627

Description: DOGENE Recombinant Human Cyclophilin B is produced with mammalian cells expression system. Target protein is expressed with sequence (Asp34-Glu216) of Human cyclophilin b (Uniprot #P23284) fused with a polyhistidine tag at the C-terminus.

Purity: Greater than 95% as determined by SEC-HPLC. Greater than 95% as determined by reducing SDS-PAGE.

Endotoxin: Less than 0.1 ng/ug (1 IEU/ug)

Formulation: DOGENE Recombinant Human PPIB was lyophilized at 1mg/ml in 20mM PBS.

Storage: Lyophilized Recombinant Human PPIB although stable at room temperature for 3 weeks, should be stored desiccated below -18 °C. Upon reconstitution Recombinant Human PPIB should be stored at 4 °C between 2-7 days and aliquots of reconstituted samples are stable up to 3 months below -18 °C for future use.

Reconstitution: We recommend a quick spin followed by reconstitution of DOGENE Recombinant Human PPIB in sterile 18M Ω-cm H2O not less than 100 μ g/ml, which can then be further diluted to working solutions. Please avoid freeze-thaw cycles.

For general laboratory use. Not for use in diagnostic procedures. FOR IN VITRO USE ONLY.
Background
Peptidyl-prolyl cis-trans isomerase B, also known as PPIase B, Rotamase B, Cyclophilin B, CYPB, and PPIB, is a member of the cyclophilin-type PPIase family and PPIase B subfamily which contains one PPIase cyclophilin-type domain. Cyclophilin B/CYPB is a cyclosporin A binding proteins that can be secreted in response to inflammatory stimuli. Cyclophilin B interaction with prolactin potentiated prolactin-induced proliferation, cell growth, and the nuclear retrotransport of prolactin. The intranuclear prolactin/cyclophilin B complex acts as a transcriptional inducer by interacting directly with Stat5, resulting in the removal of the Stat-repressor protein inhibitor of activated Stat 3 (PIAS3), thereby enhancing Stat5 DNA-binding activity and prolactin-induced, Stat5-mediated gene expression. Defects in PPIB are the cause of osteogenesis imperfecta type 9 (OI9).