Recombinant Rat Lamin B1 Protein(Trx Tag)

Catalog Number: PDER100143

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description	
Species	Rat
Source	E.coli-derived Rat Lamin B1 protein Arg387-Met587, with an N-terminal Trx
Calculated MW	42.1 kDa
Observed MW	42 kDa
Accession	P70615
Bio-activity	Not validated for activity
Properties	
Purity	> 90% as determined by reducing SDS-PAGE.
Endotoxin	< 10 EU/mg of the protein as determined by the LAL method
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80
	°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of
	reconstituted samples are stable at $< -20^{\circ}$ C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with 5% Trehalose and 5%
	Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of
	0.5 mg/mL. Concentration is measured by UV-Vis.

Data



SDS-PAGE analysis of Rat Lamin B1 proteins, 2µg/lane of Recombinant Rat Lamin B1 proteins was resolved with SDS-PAGE under reducing conditions, showing bands at 42 KD

Background

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Ephrin-B1 also known as EFNB1, is a member of the ephrin family. The transmembrane- associated ephrin ligands and their Eph family of receptor tyrosine kinases are expressed by cells of the SVZ. Eph/ephrin interactions are implicated in axon guidance, neural crest cell migration, establishment of segmental boundaries, and formation of angiogenic capillary plexi. Eph receptors and ephrins are divided into two subclasses, A and B, based on binding specificities. Ephrin subclasses are further distinguished by their mode of attachment to the plasma membrane: ephrin-A ligands bind EphA receptors and are anchored to the plasma membrane via a glycosylphosphatidylinositol (GPI) linkage, whereas ephrin-B ligands bind EphB receptors and are anchored via a transmembrane domain. An exception is the EphA4 receptor, which binds both subclasses of ephrins. EphrinB1 and B class Eph receptors provide positional cues required for the normal morphogenesis of skeletal elements. Another malformation, preaxial polydactyly, was exclusively seen in heterozygous females in which expression of the X-linked ephrinB1 gene was mosaic, so that ectopic EphB-ephrinB1 interactions led to restricted cell movements and the bifurcation of digital rays.