## Recombinant Human Ephrin-B1/EFNB1 Protein (His &Fc Tag)

## Catalog Number: PKSH031370

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

Description			
Species	Human		
Source	HEK293 Cells-derived Human Ephrin-B1/EFNB1 protein Met 1-Gly 232, with an C-		
	terminal His & Fc		
Calculated MW	51.2 kDa		
Observed MW	64&36 kDa		
Accession	NP_004420.1		
<b>Bio-activity</b>	Immobilized mouse EphB3 at 2 µg/ml (100 µl/well) can bind human EFNB1 Fc		
	chimera with a linear ranger of 1. 56-25 ng/ml.		
Properties			
Purity	> 95 % as determined by reducing SDS-PAGE.		
Endotoxin	< 1.0 EU per µg 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 -8		
	°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 sterile PBS, pH 7.4		
	Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants		
	before lyophilization.		
	Please refer to the specific buffer information in the printed manual.		
Reconstitution	Please refer to the printed manual for detailed information.		



KDa	MK	R
116 66.2	-	-
45.0	-	
35.0	-	
25.0	-	
18.4 14.4	=	

> 95 % as determined by reducing SDS-PAGE.

Background

## **Elabscience**®

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.