

# Danio rerio (zebrafish) EFNB2A / Ephrin B2a Protein (Fc Tag)

Catalog Number: 63002-Z02H



Sino Biological Inc.

Biological Solution Specialist

## General Information

### Gene Name Synonym:

EFNB2A, efnb2

### Protein Construction:

A DNA sequence encoding the zebrafish EFNB2A (O73874) (Met 1-Ala222) was expressed with the Fc region of human IgG1 at the C-terminus.

**Source:** Danio rerio (zebrafish)

**Expression Host:** Human Cells

## QC Testing

**Purity:** (16.2±75.4) % as determined by SDS-PAGE

### Bio-Activity

**Measured by its binding ability in a functional ELISA. Immobilized human EphB4-His (Cat:10235-H08H) at 10 µg/ml (100 µl/well) can bind zebrafish EFNB2A-Fc. The EC50 of zebrafish EFNB2A-Fc is 12.8-30.1 ng/ml.**

### Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

### Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

**Predicted N terminal:** Leu 25

### Molecular Mass:

The recombinant zebrafish EFNB2A consists of 439 amino acids and has a calculated molecular mass of 48.9 kDa. It migrates as an 97 and 58 KDa band in SDS-PAGE under reducing conditions.

### Formulation:

Lyophilized from sterile PBS, PH 7.4.

Normally 5 % - 8 % trehalose and mannitol are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

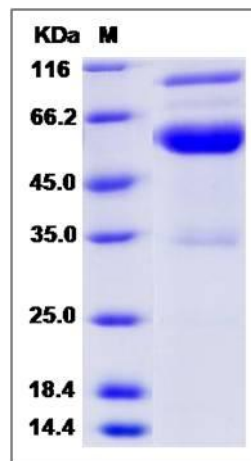
## Usage Guide

### Storage:

Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

## SDS-PAGE:



## Reconstitution:

Detailed reconstitution instructions are sent along with the products.

## Protein Description

Efnb2a, also known as ephrin B2a, belongs to the ephrin family. Members of this family are crucial for migration, repulsion and adhesion during neuronal, vascular and epithelial development. Efnb2a binds promiscuously Eph receptors residing on adjacent cells, leading to contact-dependent bidirectional signaling into neighboring cells. The signaling pathway downstream of the receptor is referred to as forward signaling while the signaling pathway downstream of the ephrin ligand is referred to as reverse signaling. Efnb2a, together with ephb4 may play a central role in heart morphogenesis and angiogenesis through regulation of cell adhesion and cell migration.

## References

1. Shaw KM. et al., 2006, Dev Dyn. 235 (7): 1753-60.
2. Kemp HA. et al., 2009, Dev Biol. 327 (2): 313-26.
3. Patten SA. et al., 2012, PLoS One. 7 (2): e31650.

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