Recombinant Human Embigin/EMB Fc Chimera

Catalog Number: 10832-EM

DESCRIPTION

Source

Human embryonic kidney cell, HEK293-derived human Embigin/EMB protein

N-terminal Sequence Analysis	Asp33
Structure / Form	Disulfide-linked homodimer
Predicted Molecular Mass	52 kDa

SPECIFICATIONS

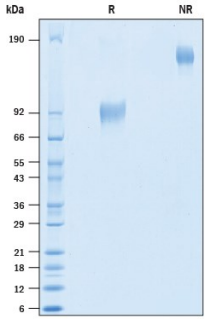
SDS-PAGE	85-100 kDa, under reducing conditions
Activity	Bioassay data are not available.
Endotoxin Level	<0.10 EU per 1 µg of the protein by the LAL method.
Purity	>95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 500 µg/mL in PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 3 months, -20 to -70 °C under sterile conditions after reconstitution.

DATA

SDS-PAGE



Recombinant Human Embigin/EMB Fc Chimera Protein SDS-PAGE. 2 µg/lane of Recombinant Human Embigin/EMB Fc Chimera (Catalog # 10832-EM) was resolved with SDS-PAGE under reducing (R) and non-reducing (NR) conditions and visualized by Coomassie® Blue staining, showing bands at 85-100 kDa and 170-200 kDa, respectively.

Bio-Techne®
Global | bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL: 1.612.379.2956
USA | TEL: 800.343.7475 Canada | TEL: 855.668.8722 Europe | Middle East | Africa TEL: +44.0.1235.529449
China | info.cn@bio-techne.com TEL: 400.821.3475

Recombinant Human Embigin/EMB Fc Chimera

Catalog Number: 10832-EM

BACKGROUND

Embigin (EMB) is a transmembrane glycoprotein belonging to the immunoglobulin superfamily (IgSF) proteins. It is a cell adhesion molecule that is preferentially expressed during mouse embryogenesis (1). Embigin, along with basigin and neuroplastin, form a small subgroup within the IgSF, with all members possessing a glutamate at the same position in the transmembrane domain (2). Mature, human Embigin is highly glycosylated and consists of an extracellular domain (ECD) wjth two Ig domains, a transmembrane region, and a short intracellular region. Within the ECD, human EMB shares 75% and 62% amino acid identity with mouse and rat EMB, respectively. Embigin is an accessory protein of monocarboxylic acid transporter, MCT2 which participates in transporting lactic acid between glial cells and neurons (3). Thus, it may be related to brain energy metabolism and has been investigated as a susceptible gene for schizophrenia (4). Embigin is highly expressed in early embryos of mice, and in the heart, lung, brain and other tissues of adult rats (5, 6). Loss of embigin promotes proliferation, anchorage-independent growth, and migration ability of breast cancer cells (7).

References:

1. Fan, Q.W. *et al.* (1998) Dev. Growth Differ. **40**:277.
2. Muramatsu, T, and Miyauchi, T. (2003) Histol. Histopathol. **18**:981.
3. Perez-Escuredo, J. *et al.* (2016) Biochim. Biophys. Acta **863**:2481.
4. Zhou, J. *et al.* (2020) BMC Psychiatry **20**:135.
5. Huang, R. *et al.* (1990) Differentiation **45**:76.
6. Guenette, R. *et al.* (1997) Dev. Genet. 4:268.
7. Chao, F. *et al.* (2015) Oncotarget **6**:23496.

Bio-Techne®
Global | bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL: 1.612.379.2956
USA | TEL: 800.343.7475 Canada | TEL: 855.668.8722 Europe | Middle East | Africa TEL: +44.0.1235.529449
China | info.cn@bio-techne.com TEL: 400.821.3475