Recombinant Protein Technical Manual

Recombinant Human BNIP3L Protein

RPES2614

Product Data:

Product SKU: RPES2614

Size: 20µg

Species: Human

Expression host: E. coli

Uniprot: Q7Z465

Protein Information:

Molecular Mass: 20.4 kDa

AP Molecular Mass: 36 kDa

Tag:

Bio-activity:

Purity: > 88 % as determined by reducing SDS-PAGE.

Endotoxin: Please contact us for more information.

Storage: 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℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile 50mM Tris, 150mM NaCl, 1mM DTT, pH 8.0

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: BNIP3a;NIX

Immunogen Information:

Sequence: Ser 2-Lys 187

Background:

The deletion of BNIP3L results in retention of mitochondria during lens fiber cell remodeling, and that deletion of BNIP3L also results in the retention of endoplasmic reticulum and Golgi apparatus. BNIP3L localizes to the endoplasmic reticulum and Golgi apparatus of wild-type newborn mouse lenses and is contained within mitochondria, endoplasmic reticulum and Golgi apparatus isolated from adult mouse liver. As the cells become packed with keratin bundles, Bnip3L expression triggers mitophagy to rid the cells of the last remaining 'living' characteristic, thus completing the march from 'living' to 'dead' within the hair follicle. during retinal development tissue hypoxia triggers HIF1A/HIF stabilization, resulting in increased expression of the mitophagy receptor BNIP3L/NIX. BNIP3L-dependent mitophagy results in a metabolic shift toward glycolysis essential for RGC neurogenesis. BNIP3L could be a potential therapeutic target for ischemic stroke