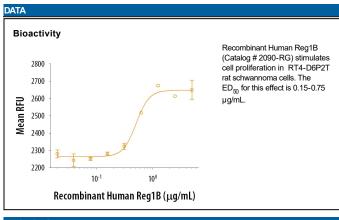


Recombinant Human Reg1B

Catalog Number: 2090-RG

DESCRIPTION	
Source	E. coli-derived Gln23-Asn166, with an N-terminal Met Accession # P48304
N-terminal Sequence Analysis	Met
Predicted Molecular Mass	16 kDa
SPECIFICATIONS	
SDS-PAGE	16 kDa, reducing conditions
Activity	Measured in a cell proliferation assay using RT4-D6P2T rat schwannoma cells. The ED $_{50}$ for this effect is 0.15-0.75 μ g/mL.
Endotoxin Level	<0.10 EU per 1 µg of the protein by the LAL method.
Purity	>95%, by SDS-PAGE with silver staining.
Formulation	Lyophilized from a 0.2 um 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.





1 µg/lane of Recombinant Human Reg1B (Catalog # 2090-RG) was resolved with SDS-PAGE under reducing (R) and non-reducing (NR) conditions and visualized by silver staining, showing bands at 17.2 and 16.7 kDa, respectively.

BACKGROUND

Reg1B also called Lithostatine-1-β or Pancreatic stone protein 2 (PSP2) is a type I subclass member of the Reg gene family. The Reg multigene family consists of four subclasses, types I, II, III and IV based on the primary structures of the encoded proteins of the genes. Reg1B is also a member of the Reg family of secreted C-type lectin domain-containing pancreatic proteins (1, 2). The human Reg1B cDNA encodes 166 amino acids protein which contains a 22 aa signal peptide and the 144 aa secreted mature protein. Reg1B shares 86% animo acide sequence identity with Reg1A and like Reg1A is secreted by the exocrine pancreas and associated with islet cell regeneration and diabetogenesis. Reg family proteins were also shown to cause Schwann cell proliferation during regeneration of motor neurons (3).

References:

- 1. Liu, J.-L. et al. (2008) Endocrine Metab. Immune Disord. Drug Targets 8:1.
- 2. Unno, M. *et al.* (1993) J. Biol. Chem. **268**:15974.
- 3. Livesey F.J. et al. (1990) Nature. 390:614

