Data Sheet (Cat.No.TMPY-03050)

TargetMol

CXCL5 Protein, Human, Recombinant

General Information

Synonyms:	ENA-78;SCYB5;chemokine (C-X-C motif) ligand 5
Protein Construction:	A DNA sequence encoding the human CXCL5 (P42830) (Arg45-Asn114) was expressed, with a N-terminal Met. Predicted N terminal: Met
Species:	Human
Expression Host:	E. coli
Accession:	P42830
Molecular Weight:	7.8 kDa (predicted); 8 kDa (reducing conditions)

QC Testing

Biological Activity:	Measured by its ability to chemoattract BaF3 mouse pro-B cells transfected with human CXCR2.
Purity:	> 95 % as determined by SDS-PAGE
Endotoxin:	Please contact us for more information.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing 80% acetonitrile, 0.1% TFA, 20% H2O. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

Reconstituted with sterile deionized water to 0.25 mg/mL. Reconstitution conditions may vary depending on the lot.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

CXCL5 is a small cytokine belonging to the CXC chemokine family. CXC chemokines are particularly significant for leukocyte infiltration in inflammatory diseases. CXCL5 is produced following stimulation of cells with the inflammatory cytokines interleukin-1 or tumor necrosis factor-alpha. It also can be detected in eosinophils, and can be inhibited with the type II interferon. CXCL5 plays a role in reducing sensitivity to sunburn pain in some subjects, and is a potential target which can be utilized to understand more about pain in other inflammatory

conditions like arthritis and cystitis. It stimulates the chemotaxis of neutrophils possesses angiogenic properties. It elicits these effects by interacting with the cell surface chemokine receptor CXCR2.

Reference

Dawes JM, et al. (2011) CXCL5 Mediates UVB Irradiation-Induced Pain. Sci Transl Med. 3(90): 90ra60.
O'Donovan N, et al. (1999) Physical mapping of the CXC chemokine locus on human chromosome 4. Cytogenet. Cell Genet. 84(1-2):39-42.
Persson T, et al. (2003) Expression of the neutrophil-activating CXC chemokine ENA-78/CXCL5 by human eosinophils. Clin Exp Allergy. 33(4):531-7.