Data Sheet (Cat.No.TMPY-03366)

TargetMol

DPEP2 Protein, Human, Recombinant (hFc)

General Information

Synonyms:	dipeptidase 2;MBD2
Protein Construction:	A DNA sequence encoding the human DPEP2 (AAH24021.1) (Met1-Ser376) was expressed, fused with the Fc region of human IgG1 at the C-terminus. Predicted N terminal: Ala 33
Species:	Human
Expression Host:	HEK293 Cells
Accession:	Q9H4A9-2
Molecular Weight:	65 kDa (predicted); 71.9 kDa (reducing conditions)

QC Testing

Biological Activity:	Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 90 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS, pH 7.4. 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:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

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

DPEP2 (MBD-2) belongs to the membrane-bound dipeptidase family. There are three members of this family as membrane-bound dipeptidase-1 (MBD-1),membrane-bound dipeptidase-2 (MBD-2) and membrane-bound dipeptidase-3 (MBD-3).MBD-2 is expressed at highest levels in lung, heart, and testis and at some what lower levels in spleen.MBD-2 is membrane-bound through a glycosylphosphatidyl-inositol linkage and probably is a metalloprotease which hydrolyzes leukotriene D4 (LTD4) into leukotriene E4 (LTE4).It is generally recognized that

rapid cleavage of LTD4 is important in inactivating the broncho-and vaso-constrictive effects of cysteinyl LTs in asthmatic and inflammatory processes.

Reference

Geetha M. Habib.et al.,2003,The FASEB Journal.
Campbell, B. Jet al.,1984,J.Biol.Chem.259,14586-14590.
Habib,G.M.,and Lieberman,M.W.1999,Adv.Exp.Med.Biol.469,295-300.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481