Data Sheet (Cat.No.TMPY-01863)

TargetMol

C1QBP Protein, Human, Recombinant (His)

General Information

Synonyms:	SF2p32;p32;GC1QBP;HABP1;gC1qR;gC1Q-R;complement component 1, q subcomponent binding protein
Protein Construction:	A DNA sequence encoding the mature form of human C1QBP (NP_001203.1) (His 75-Gln 282) fused with two Met at N-terminus and a polyhistide tag at the C-terminus was expressed and purified. Predicted N terminal: Met
Species:	Human
Expression Host:	E. coli
Accession:	Q07021
Molecular Weight:	24.8 kDa (predicted); 36 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:	> 96 % 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 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

Hyaluronan binding protein 1 (HABP1), also known as p32 or gC1qR, is a ubiquitously expressed multifunctional phospho-protein implicated in cell signalling. Hyaluronan-binding protein 1 (HABP1) /p32/gC1qR was characterized as a highly acidic and oligomeric protein, which binds to different ligands like hyaluronan, C1q, and

mannosylated albumin. The role of hyaluronan binding protein 1 (HABP1) in cell signaling was investigated and in vitro. HABP1 overexpressing cells showed extensive vacuolation and reduced growth rate, which was corrected by frequent medium replenishment. Further investigation revealed that HABP1 overexpressing cells undergo apoptosis, and they failed to enter into the S-phase. The sperm surface HABP1 level can be correlated with the degree of sperm motility.Hyaluronan binding protein 1 (HABP1) was reported to be present on human sperm surface and its involvement in fertilization has already been elucidated: decreased HABP1 level may be associated with low motility of sperms, which in turn might cause infertility in the patient. HABP1 also is an endogenous substrate for MAP kinase and upon mitogenic stimulation it is translocated to the nucleus in a MAP kinase-dependent manner.

Reference

Meenakshi J,et al.(2003) Constitutive expression of hyaluronan binding protein 1 (HABP1/p32/gC1qR) in normal fibroblast cells perturbs its growth characteristics and induces apoptosis. Biochemicaland Biophysical Research Communication. 300(3): 686-93.

Majumdar M,et al.(2002) Hyaluronan Binding Protein 1 (HABP1) /C1QBP/p32 Is an Endogenous Substrate for MAP Kinase and Is Translocated to the Nucleus upon Mitogenic Stimulation. Biochemical and Biophysical Research Communications. 291(4): 829-37.

Ghosh I,et al.(2002) Reduction in the level of hyaluronan binding protein 1 (HABP1) is associated with loss of sperm motility. Journal of Reproductive Immunology. 53(1-2): 45-54.

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