# Human HABP1 / C1QBP / GC1QBP Protein (His Tag)

Catalog Number: 11874-H08E



## **General Information**

## Gene Name Synonym:

gC1Q-R; GC1QBP; gC1qR; HABP1; p32; SF2p32

## **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.

Source: Human

Expression Host: E. coli

**QC** Testing

Purity: > 96 % as determined by SDS-PAGE

**Endotoxin:** 

Please contact us for more information.

## Stability:

Samples are stable for up to twelve months from date of receipt  $\,$  at -70  $\,$   $^{\circ}$ C

Predicted N terminal: Met

## **Molecular Mass:**

The recombinant human C1QBP consisting of 216 amino acids and has a calculated molecular mass of 24.8 kDa. It migrates as an approximately 36 kDa band in SDS-PAGE under reducing conditions.

#### Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

## **Usage Guide**

## Storage:

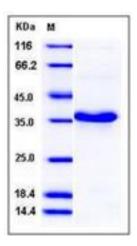
Store it under sterile conditions at  $-20\,^\circ\mathrm{C}$  to  $-80\,^\circ\mathrm{C}$  upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

## Reconstitution:

Detailed reconstitution instructions are sent along with the products.

#### SDS-PAGE:



# **Protein Description**

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 kinasedependent manner.

## References

1.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. 2.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. 3.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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