# Recombinant Human DMBT1/Muclin Protein (His Tag)

**Catalog Number: PKSH031031**

**Note:** *Centrifuge before opening to ensure complete recovery of vial contents.*

## Description

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| **Species** | Human |
| **Source** | HEK293 Cells-derived Human DMBT1/Muclin protein Met 1-Ser 220, with an C-terminal His |
| **Calculated MW** | 261 kDa |
| **Observed MW** | 35-45 kDa |
| **Accession** | NP_004397.2 |
| **Bio-activity** | 1. Immobilized recombinant human Galectin-3 at 10 μg/ml (100 μl/well) can bind biotinylated DMBT1-His with a linear range of 0.06-1.0 μg/ml. |

## Properties

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| **Purity** | > 95% as determined by reducing SDS-PAGE. |
| **Endotoxin** | < 1.0 EU per μg of the protein as determined by the LAL method. |
| **Storage** | Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months. |
| **Shipping** | This product is provided as lyophilized powder which is shipped with ice packs. |
| **Formulation** | Lyophilized from sterile PBS, pH 7.4<br>Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.<br>Please refer to the specific buffer information in the printed manual. |
| **Reconstitution** | Please refer to the printed manual for detailed information. |

## Data




> 95 % as determined by reducing SDS-PAGE.

## Background

Deleted in malignant brain tumors 1 protein, also known as glycoprotein 340, surfactant pulmonary-associated D-binding protein, DMBT1 and GP340, is a secreted protein which belongs to theDMBT1 family. DMBT1 contains 2CUB domains, 14SRCR domains and 1ZP domain. It is highly expressed in alveolar and macrophage tissues. In some macrophages, expression is detected on the membrane, and in other macrophages, it is strongly expressed in the phagosome/phagolysosome compartments. Defects in DMBT1 are involved in the development of glioma (GLM). Gliomas are central nervous system neoplasms derived from glial cells and comprise astrocytomas, glioblastoma multiforme, oligodendrogliomas, and ependymomas. DMBT1 may be considered as a candidate tumor suppressor for brain, lung, esophageal, gastric, and colorectal cancers. It may play roles in mucosal defense system, cellular immune defense and epithelial differentiation. DMBT1 may play a role as an opsonin receptor for SFTPD and SPAR in macrophage tissues throughout the body, including epithelial cells lining the gastrointestinal tract. It may be an important factor in fate decision and differentiation of transit-amplifying ductular (oval) cells within the hepatic lineage. DMBT1 may function as a binding protein in saliva for the regulation of taste sensation. It binds to HIV-1 envelope protein and has been shown to both inhibit and facilitate viral transmission.