

## 32-3649: DAG1 Recombinant Protein

**Alternative Name :** Dystroglycan, Dystrophin-associated glycoprotein  
1, DAG1, A3a, DAG, AGRNR, 156DAG, MDDGC7, MDDGC9.

### Description

Source : Escherichia Coli. DAG1 Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain (a.a 30-312) containing 293 amino acids including a 10 a.a N-terminal His tag. The total molecular mass is 31.87kDa (calculated). Dystroglycan 1 (DAG1) is a laminin binding component of the dystrophin-glycoprotein complex which provides a connection between the subsarcolemmal cytoskeleton and the extracellular matrix. The N-terminal domain of alpha-dystroglycan is secreted into the cerebrospinal fluid. The effect of DAG1 on the nervous system remains vague. The complete dystroglycan complex is expressed in a various tissues and has a role in processes such as laminin and basement membrane assembly, sarcolemmal stability, cell survival, peripheral nerve myelination, nodal structure, cell migration, and epithelial polarization. DAG1 is a candidate gene for the site of the mutation in autosomal recessive muscular dystrophies. The dramatic decrease of DAG1 in Duchenne muscular dystrophy leads to a loss of linkage between the sarcolemma and extracellular matrix, making muscle fibers more susceptible to necrosis.

### Product Info

**Amount :** 10 µg  
**Purification :** Greater than 90.0% as determined by SDS-PAGE.  
**Content :** DAG1 filtered (0.4µm) and lyophilized from 0.5mg/ml in 0.05M phosphate buffer and 0.075M NaCl, pH 7.4.  
**Storage condition :** Store lyophilized protein at -20°C. Aliquot the product after reconstitution to avoid repeated freezing/thawing cycles. Reconstituted protein can be stored at 4°C for a limited period of time; it does not show any change after two weeks at 4°C.  
**Amino Acid :** MKHHHHHHASHWPSEPSEAV RDWENQLEAS MHSVLSDLHE AVPTVVGIPD GTAVVGRSFR VTIPTDLIAS SGDIKVSAA GKEALPSWLH WDSQSHTLEG LPLDTDKGVH YISVSATRLG ANGSHIPQTS SVFSIEVYPE DHSELQSVRT ASPDPGEVVS SACAADPEVT VLTVILDADL TKMTPKQRID LLHRMRSFSE VELHNMKLVP VVNNRFDMS AFMAGPNAK KVVENGALLS WKLGC SLNQN SVPDIHGVEA PAREGAMSAQ LGYPVVGWHI ANKKPPLPKR VRR.

### Application Note

It is recommended to add 200µl deionized water to prepare a working stock solution of approximately 0.5mg/ml and let the lyophilized pellet dissolve completely. DAG1 is not sterile! Please filter the product by an appropriate sterile filter before using it in the cell culture.

