Data Sheet (Cat.No.TMPY-04266)

TargetMol

NAA10/ARD1 Protein, Human, Recombinant

General Information

Synonyms:	NAA10;ARD1;ARD1A;ARD1P;NATD;TE2;N(α)-acetyltransferase 10, NatA catalytic subunit; MCOPS1;DXS707;N(alpha)-acetyltransferase 10, NatA catalytic subunit;OGDNS
Protein Construction:	A DNA sequence encoding the human ARD1A (P41227) (Met1-Ser 235) was expressed and purified. Predicted N terminal: Gly
Species:	Human
Expression Host:	Baculovirus Insect Cells
Accession:	P41227
Molecular Weight:	26.6 kDa (predicted); 31 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 20 mM Tris, 500 mM NaCl, 10% glycerol, 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

ARD1 is a member of the 2-kDa ARF protein family. It is a multifunctional protein. ARD1 has an 18-kDa ADP-ribosylation factor (ARF) domain at the C-terminus (amino acids 43-574), and a 46-kDa N-terminal domain (amino acids 1-42). The C-terminal region of ARD1 may be involved in the formation of both ARD1-ARD1 and ARD1-NAT1 complexes. ARD1 and NAT1 genes are required for the expression of an N-terminal protein acetyltransferase. This

activity is required for full repression of the silent mating-type locus HML, for sporulation, and for entry into G. Recombinant ARD1 (amino acids 1-574) or its RING finger domain (amino acids 1-11) produced polyubiquitylated proteins when incubated in vitro with a mammalian E1, an E2 enzyme, ATP, and ubiquitin.

Reference

Tribioli C.,et al.,(1994), Isolation of new genes in distal Xq28: transcriptional map and identification of a human homologue of the ARD1 N-acetyl transferase of Saccharomyces cerevisiae. Hum. Mol. Genet. 3:1061-1068.
Arnesen T.,et al., (2005), Identification and characterization of the human ARD1-NATH protein acetyltransferase complex.Biochem. J. 386:433-443.
Ross M.T.,et al.,(2005), The DNA sequence of the human X chromosome.Nature 434:325-337.

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