

ATM Protein

Recombinant human protein expressed in Sf9 cells

Catalog # A26-35G

Lot # P1688-2

Product Description

Recombinant human ATM (2667-end) was expressed by baculovirus in Sf9 insect cells using an N-terminal GST tag. The gene accession number for ATM is [NM_000051](#).

Gene Aliases

AT1, ATA, ATC, ATD, ATE, ATDC, TEL1, MGC74674

Formulation

Recombinant protein stored in 50mM Tris-HCl, pH 7.5, 150mM NaCl, 10mM glutathione, 0.1mM EDTA, 0.25mM DTT, 0.1mM PMSF, 25% glycerol.

Storage and Stability

Store product at -70°C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.

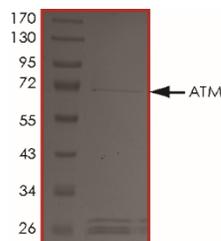
Scientific Background

The Serine/threonine protein kinase ataxia-telangiectasia mutated (ATM) is an atypical kinase of the phosphoinositide 3-kinase (PI3K)-related protein kinase PIKK family, which also includes ATM and Rad3-related protein (ATR), the catalytic subunit of DNA-dependent protein kinase (DNA-PKcs), hSMG1, and mammalian target of rapamycin (mTOR) kinases (1). It plays a prominent role as an apical activator of the DNA damage response under the circumstance of DNA double-strand breaks (DSBs). Following induction of DSBs, ATM mobilizes one of the most extensive signaling networks that responds to specific stimuli and modifies directly or indirectly a broad range of targets (2).

References

1. Lempiäinen H, Halazonetis TD. Emerging common themes in regulation of PIKKs and PI3Ks. *EMBO J.* 2009 Oct 21;28(20):3067-73.
2. Shiloh Y, Ziv Y. The ATM protein kinase: regulating the cellular response to genotoxic stress, and more. *Nat Rev Mol Cell Biol.* 2013 Apr;14(4):197-210.

Purity



The purity of ATM was determined to be **>70%** by densitometry, ATM approx. MW **70kDa**.

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Catalog #	A26-35G
Lot #	P1688-2
Purity	>70%
Concentration	0.05 µg/µl
Stability	1yr at -70°C from date of shipment
Storage & Shipping	Store product at -70°C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles. Product shipped on dry ice.