

Recombinant Mouse ADP-ribosyltransferase 2b, His-tagged

Cat. No. Art2b-2068M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant MouseART2.2 is produced in <i>E. coli</i> with a C-terminus His-tag.
Species	Mouse
Source	E.coli
Description	Extracellular NAD induces the ATP-independent activation of the ionotropic P2X(7) purinergic receptor (P2X(7)R) in murine T lymphocytes via a novel covalent pathway involving ADP-ribosylation of arginine residues on the P2X(7)R ectodomain. This modification is catalyzed by ART2.2, a GPI-anchored ADP-ribosyltransferase (ART) that is constitutively expressed in murine T cells. We previously reported that ART2.1, a related ecto-ART, is up-regulated in inflammatory murine macrophages that constitutively express P2X(7)R. Thus, we tested the hypothesis that extracellular NAD acts via ART2.1 to regulate P2X(7)R function in murine macrophages. Coexpression of the cloned murine P2X(7)R with ART2.1 or ART2.2 in HEK293 cells verified that P2X(7)R is an equivalent substrate for ADP-ribosylation by either ART2.1 or ART2.2. However, in contrast with T cells, the stimulation of macrophages or HEK293 cells with NAD alone did not activate the P2X(7)R. Rather, NAD potentiated ATP-dependent P2X(7)R activation as indicated by a left shift in the ATP dose-response relationship.
Concentration	0.5mg/ml.
Formulation	Liquid. In PBS containing 50% glycerol.

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 45-1 Ramsey Road, Shirley, NY 11967, USA

Purity ≥98%.

Storage -80°C. Avoid freeze/thaw cycles.

GENE INFORMATION

Gene Name [Art2b ADP-ribosyltransferase 2b \[Mus musculus \]](#)

Synonyms

Art2b; ADP-ribosyltransferase 2b; T-cell NAD(P)(+)-arginine ADP-ribosyltransferase 2; T-cell differentiation marker Rt6 homolog 2; T-cell ecto-ADP-ribosyltransferase 2; T-cell mono(ADP-ribosyl)transferase 2; mono(ADP-ribosyl)transferase 2B; Art; Rt6; Rt-6; Ly92b; Rt6-2; ART2.2; Art2b

Gene ID [11872](#)

mRNA Refseq [NM_019915](#)

Protein Refseq [NP_064299](#)

UniProt ID [O35975](#)

Chromosome Location 7 E3; 7 49.0 cM

Function

NAD(P)+-protein-arginine ADP-ribosyltransferase activity; transferase activity; transferase activity, transferring glycosyl groups

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