

Product Information

PAD2, GST-tagged, mouse recombinant, expressed in Sf9 cells

Catalog Number **SRP5224**
Storage Temperature -70°C

Synonyms: PADI2, mKIAA0994

Product Description

PAD2 is a member of the peptidyl arginine deiminase family of enzymes, which catalyze the post-translational deimination of proteins by converting arginine residues into citrullines in the presence of calcium ions. PAD2 has peptidylarginine deiminase activity against synthetic substrates.¹ PAD2 is mainly expressed in the central nervous system, skeletal muscle, spinal cord, cerebrum, cerebellum, and submaxillary gland.² PAD2 plays a role in the onset and progression of neurodegenerative human disorders, including Alzheimer's disease and multiple sclerosis, and it has also been implicated in glaucoma pathogenesis.

Recombinant, full-length, mouse PAD2 was expressed by baculovirus in Sf9 insect cells using an N-terminal GST tag. The gene accession number is BC049947. Recombinant protein stored in 50 mM Tris-HCl, pH 7.5, 150 mM NaCl, 10 mM glutathione, 0.1 mM EDTA, 0.25 mM DTT, 0.1 mM PMSF, and 25% glycerol.

Molecular mass: ~99 kDa

Purity: 70–95% (SDS-PAGE, see Figure 1)

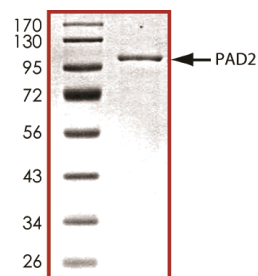
Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

The product ships on dry ice and storage at -70°C is recommended. After opening, aliquot into smaller quantities and store at -70°C . Avoid repeated handling and multiple freeze/thaw cycles.

Figure 1.
SDS-PAGE Gel of Typical Lot
70–95% (densitometry)



References

1. Ishigami, A. et. al., Human peptidylarginine deiminase type II, molecular cloning, gene organization, and expression in human skin. Arch. Biochem. Biophys., **407**, 25-31 (2002).
2. Watanabe, K. et. al., Isolation and characterization of cDNA clones encoding rat skeletal muscle peptidylarginine deiminase. J. Biol. Chem., **264**, 15255-15260 (1989).

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