

Product Information

PAD6, GST-tagged, human recombinant, expressed in Sf9 cells

Catalog Number **SRP5227**
Storage Temperature -70°C

Synonym: PADI6

Product Description

PAD6 or PADI6 is a member of the peptidyl arginine deiminases, which convert arginine residues to citrulline residues in the presence of calcium ions. The PAD family members are thought to be involved in multiple sclerosis and rheumatoid arthritis pathophysiology, and they play a role in epidermis homeostasis.¹ PAD6 is essential for formation of a novel oocyte-restricted fibrous structure, the cytoplasmic lattices (CPLs). PAD6/CPL superstructure plays a key role in regulating microtubule-mediated organelle positioning and movement.²

Recombinant, full-length, human PAD6 was expressed by baculovirus in Sf9 insect cells using an N-terminal GST tag. The gene accession number is NM_207421. 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: ~100 kDa

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

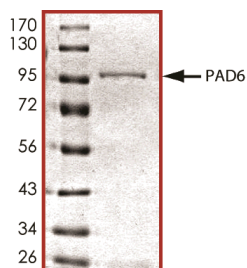
Precautions and Disclaimer

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. Vossenaar, E.R. et al., PAD, a growing family of citrullinating enzymes: genes, features and involvement in disease. *Bioessays*, **25**(11), 1106-18 (2003).
2. Kan, R. et al., Regulation of mouse oocyte microtubule and organelle dynamics by PADI6 and the cytoplasmic lattices. *Dev. Biol.*, **350**(2), 311-22 (2011).

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