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Anti-IPO7 / RANBP7 Antibody (aa1026-1038)

Goat Anti Human Polyclonal Antibody
Catalog # ALS17597

Specification

Anti-IPO7 / RANBP7 Antibody (aa1026-1038) - Product Information

Application	**WB, IHC-P, E**
Primary Accession	O95373
Predicted	**Human, Mouse, Rat, Hamster, Monkey, Bovine, Horse, Dog**
Host	**Goat**
Clonality	**Polyclonal**
Calculated MW	**119517**
Dilution	**WB~~1:1000 IHC-P~~N/A E~~N/A**

Anti-IPO7 / RANBP7 Antibody (aa1026-1038) - Additional Information

Gene ID 10527

Alias Symbol	**IPO7**

Other Names
IPO7, Importin-7, Importin 7, Ran-binding protein 7, Imp7, RAN binding protein 7, RanBP7

Target/Specificity
Human IPO7 / Importin 7.

Reconstitution & Storage
Immunoaffinity purified

Precautions
Anti-IPO7 / RANBP7 Antibody (aa1026-1038) is for research use only and not for use in diagnostic or therapeutic procedures.

Anti-IPO7 / RANBP7 Antibody (aa1026-1038) - Protein Information

Name IPO7

Synonyms RANBP7

Function
Functions in nuclear protein import, either by acting as autonomous nuclear transport receptor or as an adapter-like protein in association with the importin-beta subunit KPNB1. Acting autonomously, is thought to serve itself as receptor for nuclear localization signals (NLS) and to promote translocation of import substrates through the nuclear pore complex (NPC) by an energy requiring, Ran-dependent mechanism. At the nucleoplasmic side of the NPC, Ran binds to importin, the importin/substrate complex dissociates and importin is re-exported from the nucleus

to the cytoplasm where GTP hydrolysis releases Ran. The directionality of nuclear import is thought to be conferred by an asymmetric distribution of the GTP- and GDP-bound forms of Ran between the cytoplasm and nucleus. Mediates autonomously the nuclear import of ribosomal proteins RPL23A, RPS7 and RPL5 (PubMed:11682607). In association with KPNB1 mediates the nuclear import of H1 histone and the Ran-binding site of IPO7 is not required but synergizes with that of KPNB1 in importin/substrate complex dissociation. Promotes odontoblast differentiation via promoting nuclear translocation of DLX3, KLF4, SMAD2, thereby facilitating the transcription of target genes that play a role in odontoblast differentiation (By similarity). Facilitates BMP4-induced translocation of SMAD1 to the nucleus and recruitment to the MSX1 gene promoter, thereby promotes the expression of the odontogenic regulator MSX1 in dental mesenchymal cells (By similarity). Also promotes odontoblast differentiation by facilitating the nuclear translocation of HDAC6 and subsequent repression of RUNX2 expression (By similarity). Inhibits osteoblast differentiation by inhibiting nuclear translocation of RUNX2 and therefore inhibition of RUNX2 target gene transcription (By similarity). In vitro, mediates nuclear import of H2A, H2B, H3 and H4 histones.

Cellular Location
Cytoplasm {ECO:0000250|UniProtKB:Q9EPL8}. Nucleus {ECO:0000250|UniProtKB:Q9EPL8}. Note=Localizes to the nucleus in the presence of BMP4. {ECO:0000250|UniProtKB:Q9EPL8}

Anti-IPO7 / RANBP7 Antibody (aa1026-1038) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-IPO7 / RANBP7 Antibody (aa1026-1038) - Images