

### **KPNA6 Antibody (Internal)**

Goat Polyclonal Antibody Catalog # ALS13434

# **Specification**

### **KPNA6 Antibody (Internal) - Product Information**

Application WB, IHC Primary Accession O60684

Reactivity Human, Mouse, Rat, Rabbit, Hamster,

Monkey, Pig, Horse, Bovine, Dog

Host Goat
Clonality Polyclonal
Calculated MW 60kDa KDa

# **KPNA6 Antibody (Internal) - Additional Information**

**Gene ID 23633** 

#### **Other Names**

Importin subunit alpha-7, Karyopherin subunit alpha-6, KPNA6, IPOA7

## Target/Specificity

Human KPNA6.

#### **Reconstitution & Storage**

Store at -20°C. Minimize freezing and thawing.

#### **Precautions**

KPNA6 Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

### **KPNA6** Antibody (Internal) - Protein Information

# Name KPNA6

#### Synonyms IPOA7

#### **Function**

Functions in nuclear protein import as an adapter protein for nuclear receptor KPNB1. Binds specifically and directly to substrates containing either a simple or bipartite NLS motif. Docking of the importin/substrate complex to the nuclear pore complex (NPC) is mediated by KPNB1 through binding to nucleoporin FxFG repeats and the complex is subsequently translocated through the pore by an energy requiring, Ran-dependent mechanism. At the nucleoplasmic side of the NPC, Ran binds to importin-beta and the three components separate and importin-alpha and -beta are re-exported from the nucleus to the cytoplasm where GTP hydrolysis releases Ran from importin. 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.



**Tissue Location** Widely expressed...

# **KPNA6 Antibody (Internal) - Protocols**

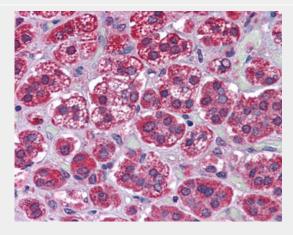
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# **KPNA6 Antibody (Internal) - Images**

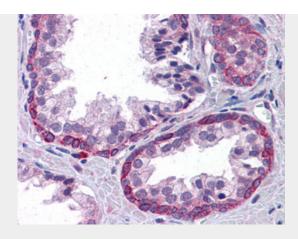


Antibody (0.1 ug/ml) staining of Human Muscle lysate (35 ug protein in RIPA buffer).



Anti-KPNA6 antibody IHC of human adrenal.





Anti-KPNA6 antibody IHC of human prostate.

# KPNA6 Antibody (Internal) - Background

Functions in nuclear protein import as an adapter protein for nuclear receptor KPNB1. Binds specifically and directly to substrates containing either a simple or bipartite NLS motif. Docking of the importin/substrate complex to the nuclear pore complex (NPC) is mediated by KPNB1 through binding to nucleoporin FxFG repeats and the complex is subsequently translocated through the pore by an energy requiring, Ran- dependent mechanism. At the nucleoplasmic side of the NPC, Ran binds to importin-beta and the three components separate and importin-alpha and -beta are re-exported from the nucleus to the cytoplasm where GTP hydrolysis releases Ran from importin. 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.

### **KPNA6 Antibody (Internal) - References**

Koehler M., et al. Mol. Cell. Biol. 19:7782-7791(1999). Ota T., et al. Nat. Genet. 36:40-45(2004). Kalnine N., et al. Submitted (AUG-2003) to the EMBL/GenBank/DDBJ databases. Gregory S.G., et al. Nature 441:315-321(2006). Mural R.J., et al. Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.