Human Importin α5/KPNA1 Antibody

Antigen Affinity-purified Polyclonal Sheep IgG
Catalog Number: AF6206

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Importin α5/KPNA1 in Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	*E. coli*-derived recombinant human Importin α5/KPNA1 Met1-Val132 Accession # P52294
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

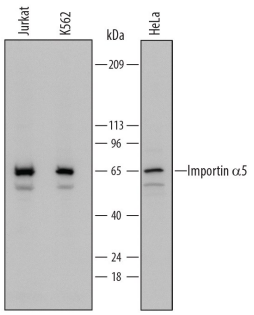
APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below

DATA

Western Blot



Detection of Human Importin α5/KPNA1 by Western Blot. Western blot shows lysates of Jurkat human acute T cell leukemia cell line, K562 human chronic myelogenous leukemia cell line, and HeLa human cervical epithelial carcinoma cell line. PVDF Membrane was probed with 1 µg/mL of Sheep Anti-Human Importin α5/KPNA1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6206) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for Importin α5/KPNA1 at approximately 65 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Importin subunit alpha-5 (KPNA1, Karyopherin subunit alpha 1; also SRP1β, NPI-1 and RAG2) is a 65 kDa member of the importin alpha family of proteins. It is ubiquitously expressed, and found in both nucleus and cytoplasm. KPNA1 functions as a cargo carrier that transports various complexes from cytoplasm into nucleus. Two scenarios are possible. First, NLS-containing cargo molecules bind to KPNA1, which then binds to importin β; alternatively, KPNA1 and importin β initially form a complex that primes KPNA1 for subsequent cargo binding. In either case, importin β binds to the nuclear pore, facilitating transport into the nucleus. Human KPNA1 is 538 amino acids (aa) in length. It contains an N-terminal IBB/importin β domain (aa 1-57), ten Armadillo repeats that bind "cargo" (aa 77-504) and two intervening NLS binding sites. Over aa 1-132, human KPNA1 shares 97% aa identity with mouse KPNA1.

bio-techne
bio-techne.com
Global info@bio-techne.com techsupport@bio-techne.com
North America TEL 800 343 7475 Europe | Middle East | Africa TEL +44 (0)1235 529449
China info.cn@bio-techne.com TEL +86 (21) 52380373
Rest of World bio-techne.com/find-us/distributors TEL +1 612 379 2956