

# TRIM5 $\alpha$ (CT) antibody (pAb)

## Rabbit Anti-Human TRIM5 $\alpha$ (Retroviral Restriction Factor)

### Instruction Manual

Catalog Number	PK-AB718-3249
Synonyms	TRIM5 alpha Antibody: TRIM5a
Description	TRIM5 is a member of a broad family of otherwise unrelated proteins defined by the presence of a tripartite motif containing a RING domain, a B-box type 1, and a B-box type 2, followed by a coiled-coil region. TRIM5 has six alternately spliced isoforms, the longest of which is the $\alpha$ -variant which also contains a carboxy-terminal B30.2 (SPRY) domain. Expression of TRIM5 $\alpha$ variants from humans, rhesus monkeys, and African green monkeys enabled resistance to infection by various retroviruses including HIV-1, albeit at differing efficiencies. All TRIM5 $\alpha$ variants could inhibit at least two different retroviruses, but not from those viruses isolated from the same species, suggesting that TRIM5 $\alpha$ acts as a natural barrier to cross-species retrovirus transmission.
Quantity	100 $\mu$ g
Source / Host	Rabbit
Immunogen	Rabbit polyclonal TRIM5 $\alpha$ antibody was raised against a synthetic peptide corresponding to amino acids near the C-terminus of rhesus monkey TRIM5 (Genbank accession No. AAS48505).
Purification Method	Affinity chromatography purified via peptide column.
Clone / IgG Subtype	Polyclonal antibody
Species Reactivity	Human
Specificity	Anti-TRIM5 alpha is human specific but should presumably also react with rhesus protein.
Formulation	Antibody is supplied in PBS containing 0.02% sodium azide.
Reconstitution	During shipment, small volumes of antibody will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 $\mu$ l or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.
Storage & Stability	Antibody can be stored at 4°C for three months and at -20°C for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Applications	E, WB, IF <span style="float: right;">INote: Antibody might be suitable for other applications not tested so far.</span> Optimal concentrations for each application have to be determined individually. Application have to be determined individually.
Images	TRIM5 alpha antibody can be used for detection of TRIM5 alpha by Western blot at 2 $\mu$ g/mL. A band at approximately 55 kDa can be detected. Anti-TRIM5 alpha is human specific but should presumably also react with rhesus protein. Antibody can also be used for immunofluorescence starting at 10 $\mu$ g/mL. For immunofluorescence start at 10 $\mu$ g/mL.
References	Reymond A, Meroni G, Fantozzi A, et al. The tripartite motif family identifies cell compartments. EMBO J. 2001; 20:2140-51. Stremlau M, Owens CM, Perron MJ, et al. The cytoplasmic body component TRIM5 $\alpha$ restricts HIV-1 infection in Old World monkeys. Nature 2004; 427:848-53. Hatzioannou T, Perez-Caballero D, Yang A, et al. Retrovirus resistance factors REF1 and Lv1 are species-specific variants of TRIM5 $\alpha$ . Proc. Nat'l. Acad. Sci. USA 2004; 101:10774-9
Images	Available upon request.
Related Products	Blocking Peptide, Cat. No. PK-AB718-3249P Human stomach Cell Lysate, Cat. No. PK-AB718-1319; Human thymus Cell Lysate, Cat. No. PK-AB718-1314; Human uterus Cell Lysate, Cat. No. PK-AB718-1317 TRIM5-alpha $\alpha$ Antibody (IN2), Cat. No. PK-AB718-3251; TRIM5-alpha $\alpha$ Antibody (IN1), Cat. No. PK-AB718-3247

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