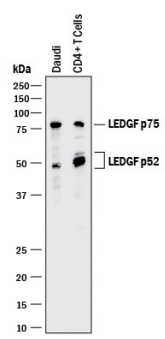


DESCRIPTION	
Species Reactivity	Human
Specificity	Detects human LEDGF in direct ELISAs and Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human LEDGF Met1-Asn530 Accession # O75475
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

APPLICATIONS		
Please Note: Optimal dilutions should be determined by each laboratory for each application. <i>General Protocols</i> are available in the <i>Technical Information</i> section on our website.		
	Recommended Concentration	Sample
Western Blot	0.5 µg/mL	See Below
Immunocytochemistry	5-15 µg/mL	See Below
Simple Western	5 µg/mL	See Below
Knockout Validated	LEDGF is specifically detected in HeLa human cervical epithelial carcinoma parental cell line but is not detectable in LEDGF knockout HeLa cell line.	

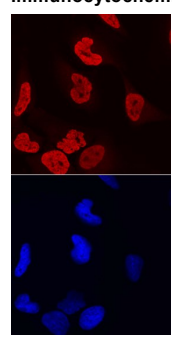
DATA

Western Blot



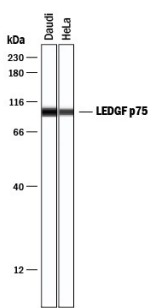
Detection of Human LEDGF by Western Blot. Western blot shows lysates of Daudi human Burkitt's lymphoma cell line and human CD4⁺ T cells. PVDF membrane was probed with 0.5 µg/mL of Goat Anti-Human LEDGF Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3468) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). Specific bands were detected for LEDGF p75 at approximately 75 kDa and LEDGF p52 at approximately 50-55 kDa (as indicated). This experiment was conducted under reducing conditions and using *Immunoblot Buffer Group 1*.

Immunocytochemistry




LEDGF in HeLa Human Cell Line. LEDGF was detected in immersion fixed HeLa human cervical epithelial carcinoma cell line using Goat Anti-Human LEDGF Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3468) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red, upper panel; Catalog # NL001) and counterstained with DAPI (blue, lower panel). Specific staining was localized to nuclei. View our protocol for *Fluorescent ICC Staining of Cells on Coverslips*.

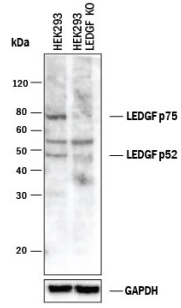
Simple Western



Detection of Human LEDGF by Simple Western™. Simple Western lane view shows lysates of Daudi human Burkitt's lymphoma cell line and HeLa human cervical epithelial carcinoma cell line, loaded at 0.2 mg/mL. A specific band was detected for LEDGF p75 at approximately 99 kDa (as indicated) using 5 µg/mL of Goat Anti-Human LEDGF Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3468) followed by 1:50 dilution of HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.



Knockout Validated



Western Blot Shows Human LEDGF Specificity by Using Knockout Cell Line. Western blot shows lysates of HeLa human cervical epithelial carcinoma parental cell line and LEDGF knockout HeLa cell line (KO). PVDF membrane was probed with 0.5 µg/mL of Goat Anti-Human LEDGF Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3468) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). Specific bands were detected for LEDGF p75 at approximately 75 kDa and LEDGF p52 at approximately 49 kDa (as indicated) in the parental HeLa cell line, but is not detectable in knockout HeLa cell line. GAPDH (Catalog # AF5718) is shown as a loading control. 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. <ul style="list-style-type: none">• 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

LEDGF, also known as transcription co-activator p75, is a 75 kDa protein that belongs to the hepatoma-derived growth factor (HDGF) family of nuclear targeted proteins. It is a widely expressed protein that interacts with lentiviral integrase. As a result of alternative splicing, isoforms with deletions, substitutions/insertions have been reported. Human LEDGF shares 91%, 92% and 96% amino acid sequence homology with rat, mouse and feline LEDGF, respectively.