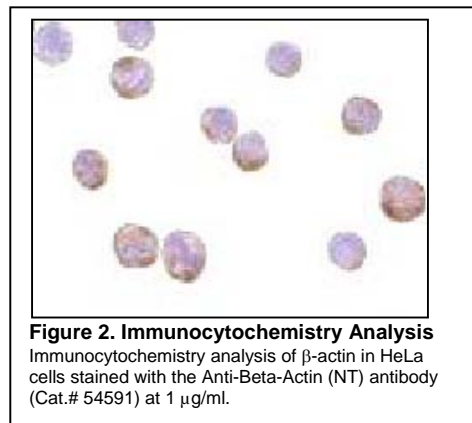
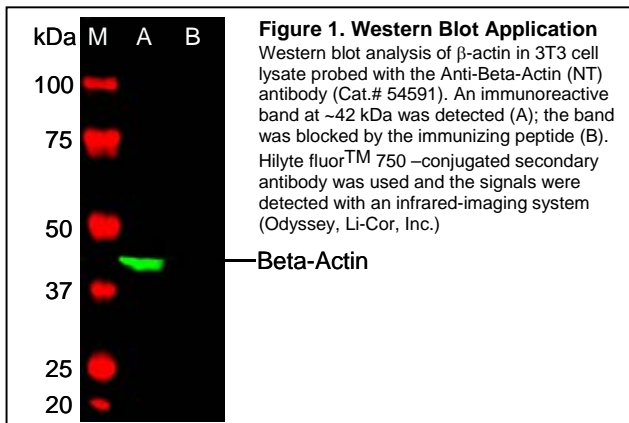
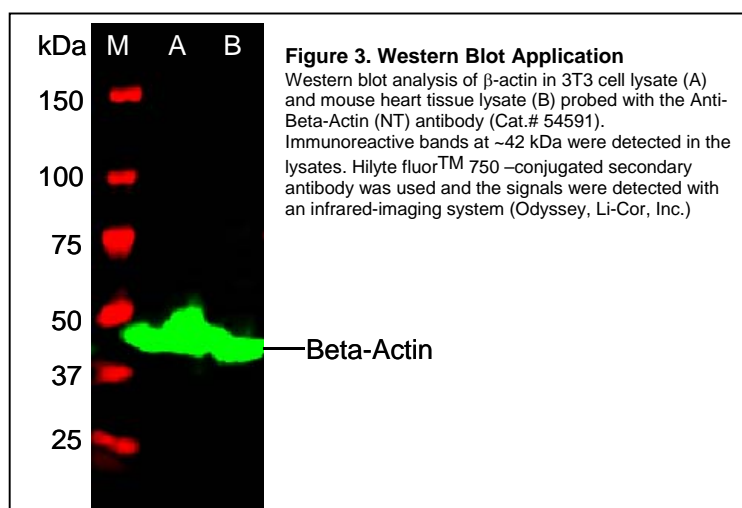




Product Data Sheet

Product Name:	Anti-Beta-Actin (NT) Antibody
Catalog Number:	AS-54591
Lot Number:	See label on vial
Product Description:	This polyclonal antibody is supplied as an epitope-affinity purified rabbit IgG 50 µg in 250 µl (0.2 mg/ml) of 1x PBS (pH 7.4) containing 0.05% sodium azide.
Immunogen:	Rabbit Anti-Beta-Actin (NT) polyclonal antibody was raised against a 21 amino acid peptide from near the N-terminus of human beta-actin (Genbank accession NP_001092.1).
Species Reactivity:	Species reactivity is specific to human, mouse, and rat. The antibody reactivity was validated by ELISA. The specificity was confirmed by Western blot analysis in 3T3 cell lysate and mouse heart tissue lysate.
Application Notes:	The following concentration ranges are recommended starting points for this product. The investigator should determine the optimal working concentrations for specific applications. ELISA for immunizing peptide: 1:5,000-20,000 Western blot: 1:500-1,000 Immunocytochemistry: 1:1,000





Background:

Actins are highly conserved proteins that are involved in cell motility, structure and integrity, processes that are crucial for tissue development and the development of the organism (1). The actin cytoskeleton is one of the principal drivers of cell motility and is capable of responding to complex signaling cascades. Recent evidence suggests that it may play key roles in regulating apoptosis and aging (2). Beta actin is one of six different actin isoforms, which have been identified. Like GAPDH, beta actin is constitutively expressed at high levels in almost all tissues and cell lines making it ideal for use as a loading control marker in immunoblots.

References:

1. Lambrechts, A. et al. *Int J Biochem Cell Biol* **36**,1890 (2004).
2. Gourlay, CW. et al. *Nat Rev* **6**, 583 (2005).

Storage:

Store at 4 °C for up to 12 months upon receiving the product. Avoid repeated freezing and thawing.

Compatible Secondary Antibodies:

Catalog #	Goat anti-Rabbit IgG (H+L)
AS-28176	Unconjugated
AS-28176-AMCA	AMCA Labeled
AS-28176-FAM	FAM Labeled
AS-28176-FITC	FITC Labeled
AS-28176-TAMRA	TAMRA Labeled
AS-28176-H488	HiLyte Fluor™ 488 Labeled
AS-28176-H555	HiLyte Fluor™ 555 Labeled
AS-28176-H594	HiLyte Fluor™ 594 Labeled
AS-28176-H647	HiLyte Fluor™ 647 Labeled
AS-28176-H680	HiLyte Fluor™ 680 Labeled
AS-28176-H750	HiLyte Fluor™ 750 Labeled
AS-61056-H488	Highly Cross-adsorbed, HiLyte Fluor™ 488 Labeled
AS-61056-H555	Highly Cross-adsorbed, HiLyte Fluor™ 555 Labeled
AS-61056-H594	Highly Cross-adsorbed, HiLyte Fluor™ 594 Labeled
AS-61056-H647	Highly Cross-adsorbed, HiLyte Fluor™ 647 Labeled
AS-61056-H680	Highly Cross-adsorbed, HiLyte Fluor™ 680 Labeled
AS-61056-H750	Highly Cross-adsorbed, HiLyte Fluor™ 750 Labeled
AS-28177	Highly Cross-adsorbed, HRP Labeled
AS-28178	Highly Cross-adsorbed, AP Labeled
AS-28179	Highly Cross-adsorbed, Biotin Labeled

This product is for *in vitro* research use only.