

DESCRIPTION

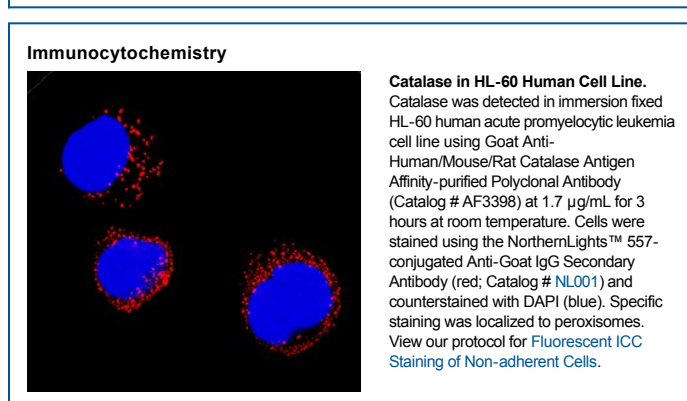
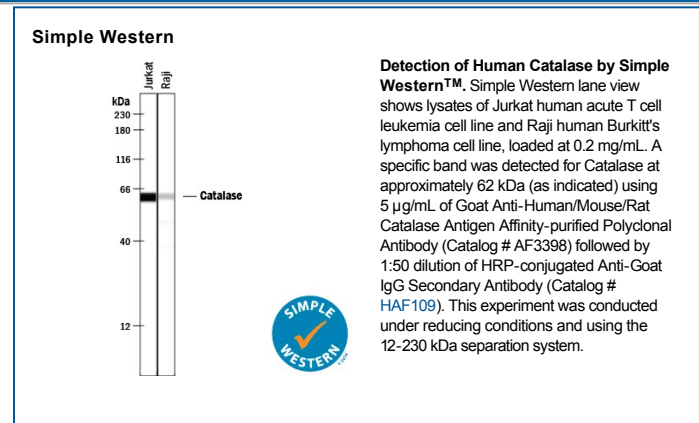
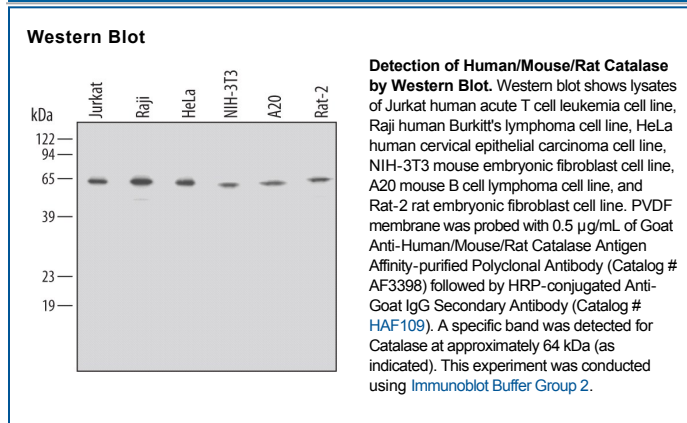
Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse and rat Catalase in Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Catalase Met1-Leu527 Accession # P04040
Formulation	Lyophilized from a 0.2 µm filtered 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	0.5 µg/mL	See Below
Immunocytochemistry	1-15 µg/mL	See Below
Simple Western	5 µg/mL	See Below

DATA



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

Cells have evolved complex mechanisms to maintain redox balance and defend against oxidative stress. Catalase is a tetrameric enzyme comprised of four 60 kDa subunits. Catalase is typically localized in the peroxisome where it functions as an antioxidant, protecting cells from damage due to oxidative stress. Catalase converts reactive oxygen species, such as H₂O₂, into water and O₂. Human Catalase shares 89% homology to mouse and rat Catalase. The cells redox environment can serve as an important signaling switch or trigger to initiate a number of cellular processes, including gene expression, differentiation, proliferation and apoptosis.