

Cathepsin B Polyclonal Antibody

CATALOG NO:	3190-30T	30 µg (Trial size)
	3190-100	100 µg
HOST:	Rabbit	
IMMUNOGEN:	Synthetic peptide surrounding amino acid 322 of human cathepsins B (ID# BV-381)	
SPECIES REACTIVITY:	Human, Mouse, Rat	

FORMULATION:

0.2 mg/ml affinity purified rabbit anti-cathepsin B polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 30% glycerol, 0.5% BSA, and 0.01% thimerosal.

BACKGROUND:

Cathepsin B is a normal lysosomal cysteine proteinase that is expressed in all cells. It is synthesized as an inactive 43 kDa pro-enzyme which, by removal of a 62 amino acid propeptide, is activated to the single-chain form of 31 kDa or the two-chain form (25 and 5 kDa subunits). Matured cathepsin B is normally localized in the lysosomes where it functions in protein turnover. Cathepsin B is also shown capable of degrading extracellular matrix proteins. Elevated levels of cathepsin B correlate with malignancy suggesting that this enzyme may be a useful prognostic marker for several types of human cancers.

SPECIFICITY:

The purified antibody detects both the proform (37-43 kDa) and the mature form (25 kDa) of cathepsin B. It reacts with human and mouse and in a lesser extent with rat samples.

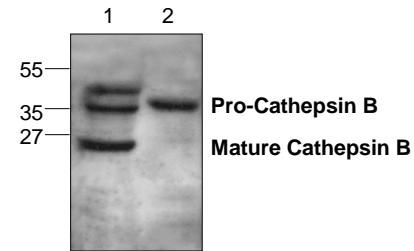
APPLICATION AND USAGE:

The antibody can be used for Western blotting (0.5-4 µg/ml), FACS (1:50 dilution v/v), and in Immunohistochemistry (1:100 dilution). However, the optimal conditions should be determined individually. Blocking peptide is available separately (Cat. # 3190BP-50).

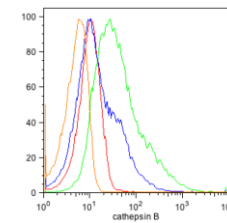
STORAGE CONDITIONS:

Store at -4°C. For long-term storage, aliquot and freeze at -20°C to -70°C. Avoid repeated freeze/thaw cycles.

FOR RESEARCH USE ONLY! Not to be used on humans.



Cat.# 3190-100
Western blot analysis of Cathepsin B with Jurkat cell (Lane 1) and mouse small intestine tissue (Lane 2) lysate.



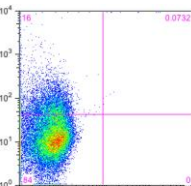
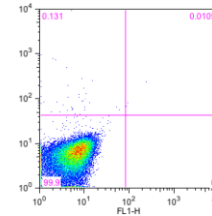
Phagosomes
Beads alone
Event Count: 27476

Sample	
Orange	beads alone
Green	catB (BV) 60 min PE
Blue	catB (BV) 10 min PE
Red	PE alone

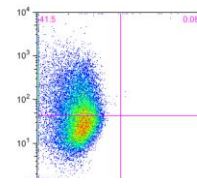
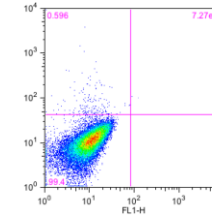
Phagosomes
PE alone
Event Count: 27518

Cat # 3190-100

Flow Cytometry analysis of Cathepsin B levels within phagosomes of macrophages



Phagosomes
Cathepsin B – 10 min PE
Event Count: 28706



Phagosomes
Cathepsin B – 60 min PE
Event Count: 27834