

#### DESCRIPTION

|                                                                                                                                                                                                         |                                                                                          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b>                                                                                                                                                                               | Human/Mouse/Rat                                                                          |
| <b>Specificity</b>                                                                                                                                                                                      | Detects human, mouse, and rat BAT3/BAG6 in Western blots.                                |
| <b>Source</b>                                                                                                                                                                                           | Polyclonal Sheep IgG                                                                     |
| <b>Purification</b>                                                                                                                                                                                     | Antigen Affinity-purified                                                                |
| <b>Immunogen</b>                                                                                                                                                                                        | <i>E. coli</i> -derived recombinant human BAT3/BAG6<br>Met1-Gln190<br>Accession # P46379 |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 647<br>Excitation Wavelength: 650 nm<br>Emission Wavelength: 668 nm          |
| <b>Formulation</b>                                                                                                                                                                                      | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide                             |
| *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |                                                                                          |

#### 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.

|                            |                                                                        |
|----------------------------|------------------------------------------------------------------------|
| <b>Western Blot</b>        | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunocytochemistry</b> | Optimal dilution of this antibody should be experimentally determined. |

#### PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

#### BACKGROUND

BAT3 (HLA-B-associated transcript 3; also BAG6, BAG family molecular chaperone regulator 6, Protein G3 and Scythe) is a multifunctional molecule that is not easily placed into known protein families. Although its predicted MW is 119 kDa, it runs anomalously in SDS-PAGE at 150-170 kDa. BAT3 is found in diverse cell types such as dendritic cells, hepatocytes, renal epithelial cells and tumor cells. It is found extracellularly where it is complexed to Hsp70, and activates the NKp30 receptor expressed on NK cells. Intracellularly, it binds to TGF-β receptors I and II where, upon receptor ligation, it translocates to the nucleus and activates TGF-β target genes. Human BAT3 is 1132 amino acids (aa) in length. It contains one Ub-like domain (aa 17-77), two Pro-rich regions (aa 195-273 and 394-681), an NLS (aa 1030-1052) plus a BAG domain (aa 1053-1101). BAT3 is phosphorylated on multiple Ser/Thr residues. Caspase 3 will cleave BAT3 after Asp1001, generating a 20 kDa C-terminal fragment. There are also multiple splice variants. Two of them share an absence of aa 185-190 that may be accompanied by a 36 aa insertion after Gly489. Over aa 1-190, human BAT3 shares 93% aa identity with mouse BAT3.

#### PRODUCT SPECIFIC NOTICES

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