

## DESCRIPTION

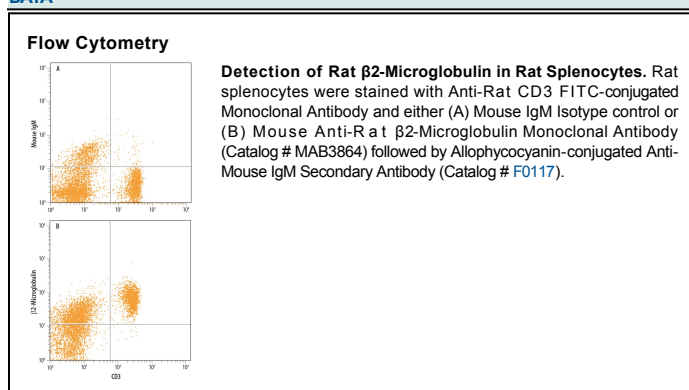
<b>Species Reactivity</b>	Rat
<b>Specificity</b>	Detects rat $\beta_2$ -Microglobulin in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant rat $\alpha_2$ -Macroglobulin is observed.
<b>Source</b>	Monoclonal Mouse IgM Clone # 747502
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant rat $\beta_2$ -Microglobulin Ile21-Met119 Accession # P07151
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 $\mu$ m 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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Flow Cytometry</b>	2.5 $\mu$ g/10 <sup>6</sup> cells	See Below

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.5 mg/mL.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

$\beta_2$ -Microglobulin ( $\beta_2$ M) is a ubiquitous, 12 kDa, secreted, non-glycosylated protein required for cell surface expression and non-covalent assembly of MHC Class I molecules and CD1 cell surface glycoproteins. Mature rat  $\beta_2$ M is a 99 amino acid (aa) peptide containing one C1-type Ig-like domain (aa 22-116). In humans,  $\beta_2$ M is known to dissociate from the MHC complex and circulate as full-length and N-terminal-truncated peptides of 93, 91, and 90 amino acids. Mature rat  $\beta_2$ M is 86% and 75% identical to the corresponding mouse and human protein sequences, respectively.