

## HRP Mouse Anti-human $\beta$ 2-Microglobulin Antibody \*B2M-01, monoclonal, Cross Adsorbed\*

Catalog Number: V103200

Unit Size: 0.1 mg

### Product Details

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|--------------------|---|
| Storage Conditions | 2-8°C with minimized light exposure. Do not freeze.                       |
| Expiration Date    | 12 months upon receiving  |
| Concentration      | 0.2 mg/mL   |
| Formulation        | Phosphate-buffered saline (PBS, pH 7.2), 0.01% thimerosal, 0.2% (w/v) BSA |

### Antibody Properties

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|--------------------|-------------------------|
| Species Reactivity | Human                   |
| Class              | Primary                 |
| Clonality          | Monoclonal              |
| Host               | Mouse                   |
| Immunogen          | $\beta$ 2-Microglobulin |
| Clone              | B2M-01                  |

### Biological Properties

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|             |   |
|-------------|---|
| Appearance  | Liquid  |
| Preparation | Antibody purified by affinity chromatography, cross-adsorbed against mouse, rabbit, dog, cow, chicken serum and then conjugated with HRP under optimal conditions |
| Application | WB, ELISA   |

### Spectral Properties

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|-----------|-----|
| Conjugate | HRP |
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### Applications

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$\beta$ 2-Microglobulin is a 16 kDa protein that can be located in the tertiary granule lumen, extracellular exosome and recycling endosome membrane of cells. Sequencing of  $\beta$ 2-microglobulin has shown it contains a primary structural unit, the Ig-like C1-type domain.  $\beta$ 2-Microglobulin recognizes identical protein. It downregulates epithelial cell proliferation, neurogenesis and neuron projection development. But on the other hand, it also positively regulates cellular senescence, transferrin receptor binding and T cell mediated cytotoxicity.  $\beta$ 2-Microglobulin has been found to be involved in organismal processes, for example, modulation of age-related behavioral decline, response to molecule of bacterial origin and cellular response to iron(III) ion.  $\beta$ 2-Microglobulin is the subject of extensive research because of the fact that it plays a role in the interferon- $\gamma$ -mediated signaling pathway.  $\beta$ 2-microglobulin is clinically significant because abnormalities in its function have been associated with diseases like

Amyloidosis 8 (AMYL8) and Immunodeficiency 43 (IMD43). Amyloidosis 8, an autosomal dominant inherited disorder characterized by proteinuria, hypertensive disorder and edema, has especially been of interest to researchers.