

**β2-microglobulin Antibody**

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**For Research Use Only. Not for Use in Diagnostic Procedures.**

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H Mk	Endogenous	12	Rabbit	#P61769	567

**Product Usage Information****Application**

Western Blotting

**Dilution**

1:1000

**Storage**

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

**Specificity/Sensitivity**

β2-microglobulin Antibody recognizes endogenous levels of total β2-microglobulin (B2M) protein.

**Source / Purification**

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Pro52 of human β2-microglobulin (B2M) protein. Antibodies are purified by protein A and peptide affinity chromatography.

**Background**

β2-microglobulin (B2M) is a principal component of the Major Histocompatibility Complex (MHC) class I molecule, a ternary membrane protein complex that displays fragments derived from proteolyzed cytosolic proteins on the surface of cells for recognition by the surveillance immune system (1,2). As an integral component of the MHC class I complex, β2-microglobulin plays a critically important role in immune system function (3). It has important relevance to cancer biology research; for example, research studies have shown that nearly one-third of diffuse large B cell lymphomas contain mutations that inactivate β2-microglobulin gene function, thereby allowing tumor cells to escape immune detection (4). In addition, β2-microglobulin has been identified as an amyloid preprotein with collagen-binding affinity (5); its accumulation in osteoarthritic lesions of long-term dialysis patients is reportedly a contributing factor to the condition known as amyloid osteoarthropathy (6).

**Background References**

1. Krangel, M.S. et al. (1979) *Cell* 18, 979-91.
2. Collins, E.J. et al. (1995) *Proc Natl Acad Sci USA* 92, 1218-21.
3. Marx, J.I. (1974) *Science* 185, 428-9.
4. Challa-Malladi, M. et al. (2011) *Cancer Cell* 20, 728-40.
5. Gorevic, P.D. et al. (1985) *J Clin Invest* 76, 2425-9.
6. Ohashi, K. (2001) *Pathol Int* 51, 1-10.

**Species Reactivity**

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

**Western Blot Buffer**

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

**Applications Key**

**W:** Western Blotting

**Cross-Reactivity Key**

**H:** Human **Mk:** Monkey

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