

**CD3G**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO2738a**

**Specification**

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**CD3G - Product Information**

Application	<b>E, WB</b>
Primary Accession	<a href="#">P09693</a>
Reactivity	<b>Human</b>
Host	<b>Mouse</b>
Clonality	<b>Monoclonal</b>
Isotype	<b>Mouse IgG1</b>
Calculated MW	<b>20.5kDa KDa</b>

**Immunogen**

Purified recombinant fragment of human CD3G (AA: extra 23-116) expressed in E. Coli.

**Formulation**

Purified antibody in PBS with 0.05% sodium azide

**CD3G - Additional Information**

**Gene ID** 917

**Other Names**

T3G; IMD17; CD3-GAMMA

**Dilution**

E~~ 1/10000

WB~~ 1/500 - 1/2000

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

CD3G is for research use only and not for use in diagnostic or therapeutic procedures.

**CD3G - Protein Information**

**Name** CD3G

**Synonyms** T3G

**Function**

Part of the TCR-CD3 complex present on T-lymphocyte cell surface that plays an essential role in adaptive immune response. When antigen presenting cells (APCs) activate T-cell receptor (TCR), TCR- mediated signals are transmitted across the cell membrane by the CD3 chains CD3D, CD3E,

CD3G and CD3Z. All CD3 chains contain immunoreceptor tyrosine-based activation motifs (ITAMs) in their cytoplasmic domain. Upon TCR engagement, these motifs become phosphorylated by Src family protein tyrosine kinases LCK and FYN, resulting in the activation of downstream signaling pathways (PubMed:<a href="http://www.uniprot.org/citations/2470098" target="\_blank">2470098</a>). In addition to this role of signal transduction in T-cell activation, CD3G plays an essential role in the dynamic regulation of TCR expression at the cell surface (PubMed:<a href="http://www.uniprot.org/citations/8187769" target="\_blank">8187769</a>). Indeed, constitutive TCR cycling is dependent on the di-leucine-based (diL) receptor-sorting motif present in CD3G.

### Cellular Location

Cell membrane; Single-pass type I membrane protein

### CD3G - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### CD3G - Images

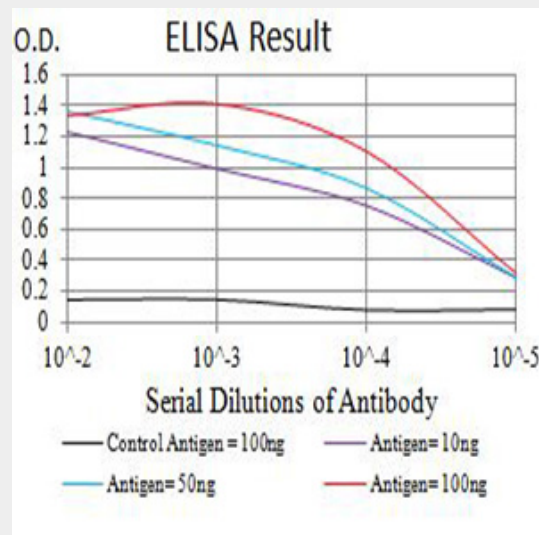


Figure 1: Black line: Control Antigen (100 ng); Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line: Antigen (100 ng)

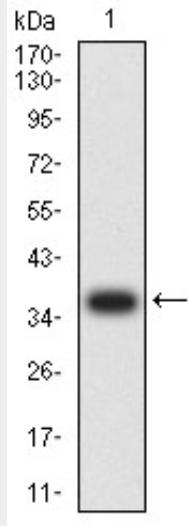


Figure 2:Western blot analysis using CD3G mAb against human CD3G (AA: extra 23-116) recombinant protein. (Expected MW is 36.6 kDa)

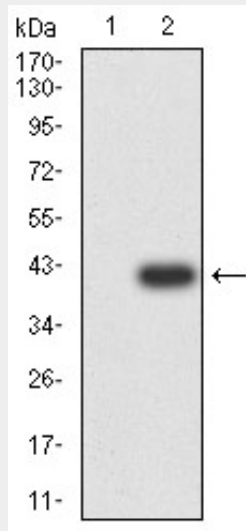


Figure 3:Western blot analysis using CD3G mAb against HEK293 (1) and CD3G (AA: extra 23-116)-hlgGFc transfected HEK293 (2) cell lysate.

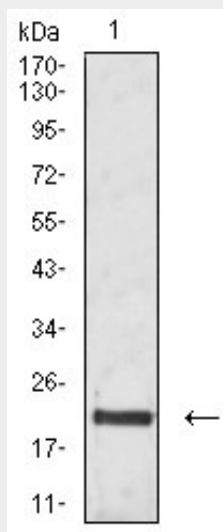


Figure 4:Western blot analysis using CD3G mouse mAb against Jurkat (1) cell lysate.

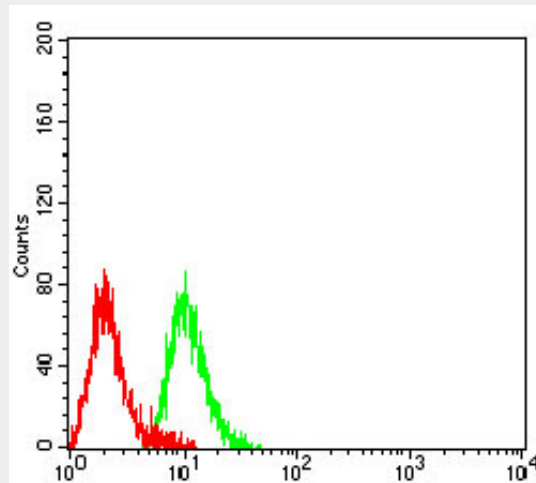


Figure 5:Flow cytometric analysis of Raji cells using CD3G mouse mAb (green) and negative control (red).

### CD3G - References

- 1.Scand J Immunol. 2014 Nov;80(5):354-61.
- 2.DNA Cell Biol. 2012 Sep;31(9):1480-5.