



Product Specification Sheet

Human Granzyme B antibody

□ Cat # GZMB11-A

Rabbit anti-Human Granzyme B antibody

SIZE: 100 ug

Granzyme B is an enzyme necessary for target cell lysis in cell-mediated immune responses. It cleaves after Asp. Seems to be linked to an activation cascade of caspases responsible for apoptosis execution. Granzyme B cleaves caspase-3, 7, 9, and 10 to give rise to active enzymes mediating apoptosis.

Source of Antigen or Antibodies

Uniprot: P10144

Host: Rabbit

Clonality: Polyclonal

Purification: Ammonium sulfate followed by peptide affinity purification

Immunogen: 20 amino acid synthetic peptide from the mid region of Human Granzyme B

Species Reactivity: Human

Cross reactivity: The peptide used as an immunogen exhibits 100% homology with Gorilla, and Chimpanzee. 90% Orangutan and Rhesus. 85% Baboon. Due to low reactivity, it is not recommended for other species.

Subcellular Location: Cytoplasmic granule

Alternative names: C11. CTLA-1. Cathepsin G-like 1. Cytotoxic T-lymphocyte proteinase 2. Fragmentin-2. Granzyme-2. Human lymphocyte protein

Recommended Secondary Antibody: Goat anti-Rabbit IgG-HRP (**ADI cat#20320**)

Negative Control: Non-immune Rabbit IgG (**ADI cat# 20009-1**).

Form & Storage of Antibodies

□ **Affinity purified IgG Solution**

Concentration: 0.5 mg/ml Volume: 200 µl
Supplied in PBS pH 7.4 + 0.1% BSA

*Antibody can be made available carrier free or conjugated to HRP, Biotin, or FITC on request

□ **Lyophilized powder**

Reconstitute powder in 200 µl distilled water to 0.5 mg/ml

Storage:

Short-term: 4°C for 1 month

Long-term: at -20°C or below in suitable aliquots after reconstitution for 1 year. Do not expose to multiple freeze/thaw cycles or store working, diluted solutions.

Recommended Usage

ELISA: Assay dependent concentration. Typically 0.1-2.0 µg/ml for capture or detection antibody

Western Blotting: 0.5-1 µg/ml

Observed Band size: ~32 kDa. **Note:** Granzyme B is present at very low levels and will likely be below the detection limit of traditional Western Blots in endogenous tissue with most tissues and cell lines.

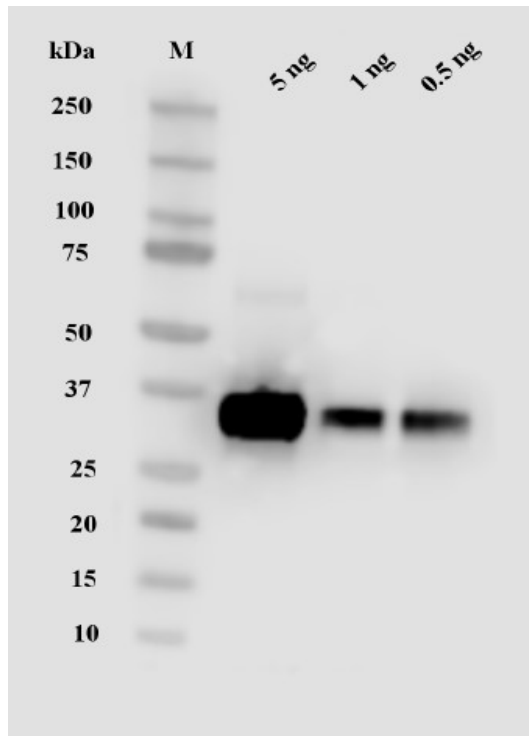
IHC-P: 5-10 µg/ml.

*Above concentrations are a suggestion and user's must optimize assay based on their conditions. Antibody may work in other applications such as ICC or IP. These methods have not been tested by ADI.

**This product is for In vitro research use only.*

GZMB11-A

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Recombinant HEK293 expressed Human Granzyme B (amino acids 1-247) was loaded at 5, 1 and 0.5 ng total protein. The protein was heated for 5 minutes at 95°C then separated on a 4-20% SDS-PAGE gel. The gel was run for ~1 hour and 30 minutes at 100V and transferred to a 0.2 µm nitrocellulose membrane using the 'Mixed MW' settings on a Transblot Turbo (Biorad). The blot was blocked for 1 hour at room temperature with Fish plasma (Aquablock, EastCoastBio). **GZMB11-A** was diluted with TBST+0.1% BSA to 1 µg/ml and incubated overnight at 4°C. Blot was washed with TBS-T 3 times for 5 minutes each. Goat anti-rabbit IgG HRP (**ADI cat#20320**) diluted 1:10,000 (50 ng/ml) in TBST+0.1% BSA and incubated for 1 hour at room temperature. The blot was washed with TBS-T 3 times for 5 minutes each. The blot was incubated with ADI Femto ECL substrate (**ADI cat#80210**) for 5 minutes then imaged on a CCD imaging system (LI-COR, C-DIGIT). Specific band is observed at ~32 kDa.