Mouse Caspase-11/Caspase-4 Antibody
Recombinant Monoclonal Rabbit IgG Clone # 1172C
Catalog Number: MAB8648

DESCRIPTION
Species Reactivity  Mouse
Specificity  Detects mouse Caspase-11/Caspase-4 in Western blots.
Source  Recombinant Monoclonal Rabbit IgG Clone # 1172C
Purification  Protein A or G purified from cell culture supernatant
Immunogen  HEK293 human embryonic kidney cell line transfected with mouse Caspase-11/Caspase-4
Accession #  P70343
Formulation  Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.
  *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μm 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.

<table>
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<tr>
<th>Recommended Concentration</th>
<th>Sample</th>
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<td>1 µg/mL</td>
<td>See Below</td>
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DATA

Western Blot

Detection of Mouse Caspase-11/Caspase-4 by Western Blot. Western blot shows lysates of mouse splenocytes untreated (-) or treated (+) with LPS. PVDF membrane was probed with 1 µg/mL of Rabbit Anti-Mouse Caspase-11/Caspase-4 Monoclonal Antibody (Catalog # MAB8648) followed by HRP-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # HAF008). Specific bands were detected for Caspase-11/Caspase-4 at approximately 36, 44, and 46 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

PREPARATION AND STORAGE
Reconstitution  Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping  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
Stability & Storage  Use a manual defrost freezer and avoid repeated freeze-thaw cycles.
  • 12 months from date of receipt, -20 to -70 °C as supplied.
  • 1 month, 2 to 8 °C under sterile conditions after reconstitution.
  • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND
Mouse Caspase-11 (commonly referred as Caspase-4) is a member of the cysteine-aspartic acid protease family known as caspsases that function in initiating apoptosis or activating proinflammatoty cytokines. Mouse Caspase-11 is expressed as a 343 amino acid latent zymogen. The active caspase-11 is cleaved into two subunits, p20 (aa 81-266) and p10 (aa 286-373). Caspase-11 is one of several caspsases associated with the inflammasome and plays an important role in the activation of proinflammatoty cytokines. Caspase-11 is activated by an autocatalytic mechanism or by cleavage by Caspase-8 in response to ER stress or bacterial infection, and its expression and activation can be induced by exposure to LPS. The active enzyme can cleave and activate Caspase-1 which in turn activates IL-1 beta. Mouse Caspase-11 has a 59 and 89% homology to human and rat Caspase-4, respectively.