

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human ADAM23 in direct ELISAs.
<b>Source</b>	Monoclonal Mouse IgG <sub>2A</sub> Clone # 504425
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Chinese hamster ovary cell line CHO-derived recombinant human ADAM23 Ser60-His585 Accession # O75077
<b>Formulation</b>	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.

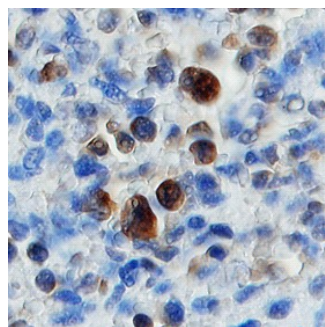
## APPLICATIONS

**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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Immunohistochemistry</b>	8-25 µg/mL	See Below

## DATA

### Immunohistochemistry



**ADAM23 in Human Spleen.** ADAM23 was detected in immersion fixed paraffin-embedded sections of human spleen using 15 µg/mL Mouse Anti-Human ADAM23 Monoclonal Antibody (Catalog # MAB4974) overnight at 4 °C. Before incubation with the primary antibody tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained with the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

ADAM23 (a disintegrin and metalloprotease domain 23; also MDC3) is a 100 kDa member of the M12B peptidase family of enzymes. It is expressed on fetal neurons in the hippocampus and cerebellum, and serves as a counter-receptor for  $\alpha_v\beta_3$  integrin. The human ADAM23 proprecursor is a 773 amino acid (aa) type I transmembrane (TM) protein. It contains a 227 aa cleavable proregion (aa 60-286) and a 506 aa extracellular domain (ECD) (aa 287-792) that is part of a 70 kDa mature molecule. The ECD contains a nonfunctional metalloprotease domain (aa 299-494), an integrin-binding disintegrin region (aa 511-585), and a Cys-rich domain (aa 589-611). Two splice variants exist. One shows an in-frame 46 aa substitution for aa 787-832 that generates a soluble form, while a second shows an in-frame 31 aa TM substitution for aa 787-817. Over aa 60-585, human ADAM23 shares 92% aa sequence identity with mouse ADAM23.