

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human ADAM23 in direct ELISAs.
Source	Monoclonal Mouse IgG _{2A} Clone # 504425
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human ADAM23 Ser60-His585 Accession # O75077
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 as a 0.2 µm filtered solution in PBS.

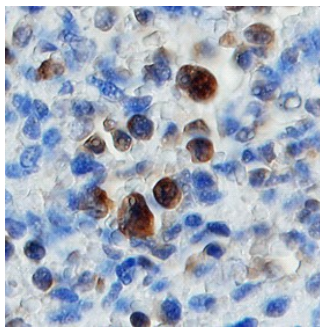
APPLICATIONS

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.

	Recommended Concentration	Sample
Immunohistochemistry	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

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. <ul style="list-style-type: none"> ● 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

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 α_vβ₃ 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.