

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human SMOC-2 in direct ELISAs and Western blots. In Western blots, approximately 15% cross-reactivity with recombinant human (rh) SMOC-1 and no cross-reactivity with recombinant mouse SMOC-2 is observed.
Source	Monoclonal Mouse IgG _{2B} Clone # 667713
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human SMOC-2 Gln22-Gly446 Accession # Q9H3U7
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.

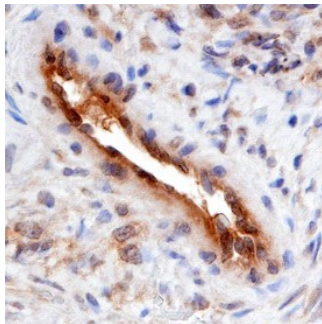
APPLICATIONS

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



SMOC-2 in Human Ovarian Cancer Tissue. SMOC-2 was detected in immersion fixed paraffin-embedded sections of human ovarian cancer tissue using Human SMOC-2 Monoclonal Antibody (Catalog # MAB5140) at 15 µg/mL 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 using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Specific staining was localized to endothelial cells. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
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

SMOC-2 (secreted modular calcium-binding protein 2; also SMAP2) is a 55 kDa glycoprotein member of the SPARC family of matricellular proteins. It is widely expressed, perhaps by endothelium, and apparently participates in both growth factor signaling and ECM organization. Mature human SMOC-2 is 425 amino acids (aa) in length. It contains one Kazal-like domain (aa 40-84), two thyroglobulin type-1 segments (aa 87-153 and 213-281), and two EF-hand sequences (aa 347-382 and 384-419). There are three splice variants. One shows a 13 aa substitution for aa 442-446, another shows an 11 aa insertion after Thr170, and a third represents a combination of the above two variations. Over aa 22-446, human SMOC-2 shares 95% aa identity with mouse SMOC-2.