

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Sigma-1 R in direct ELISAs.
Source	Recombinant Monoclonal Rabbit IgG Clone # 1319A
Purification	Protein A or G purified from cell culture supernatant
Immunogen	Synthetic peptide containing human Sigma-1 R Accession # Q99720
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.

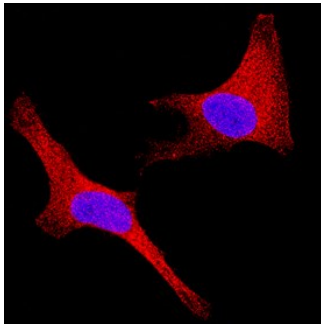
APPLICATIONS

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.

	Recommended Concentration	Sample
Immunocytochemistry	3-25 µg/mL	See Below

DATA

Immunocytochemistry



Sigma-1 R in HeLa Human Cell Line.
Sigma-1 R was detected in immersion fixed HeLa human cervical epithelial carcinoma cell line using Rabbit Anti-Human Sigma-1 R Monoclonal Antibody (Catalog # MAB1076) at 3 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Rabbit IgG Secondary Antibody (red; Catalog # NL004) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

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

Sigma non-opioid intracellular receptor 1 (SIGMAR1, OPRS1 or Sigma1 receptor) is a 223 aminoacids (aa), 25KDa chaperone protein at the endoplasmic reticulum (ER) that modulates calcium signaling through the IP3 receptor. Sigmar1 functions as a lipid transporter and is involved in a wide array of cellular functions probably through regulation of the biogenesis of lipid microdomains at the plasma membrane. In Human, at least 4 other isoforms have been found, ranging from 12-22 KDa.