

Anti-Human CRM1 DyLight® 488 conjugated XPO1 Antibody (monoclonal, 5G3)

Catalog # ABO14787

Product Information

Application	FC
Primary Accession	O14980
Host	Mouse
Isotype	Mouse IgG2b
Reactivity	Human
Clonality	Monoclonal
Format	Liquid
Description	Anti-Human CRM1 DyLight® 488 conjugated XPO1 Antibody (monoclonal, 5G3) . Tested in Flow Cytometry applications. This antibody reacts with Human.

Additional Information

Gene ID	7514
Other Names	Exportin-1, Exp1, Chromosome region maintenance 1 protein homolog, XPO1, CRM1
Calculated MW	123386
Application Details	Flow Cytometry, 1-3 µg/1x10 ⁶ cells
Subcellular Localization	Cytoplasm. Nucleus, nucleoplasm. Nucleus, Cajal body. Nucleus, nucleolus. Located in the nucleoplasm, Cajal bodies and nucleoli. Shuttles between the nucleus/nucleolus and the cytoplasm.
Tissue Specificity	Expressed in heart, brain, placenta, lung, liver, skeletal muscle, pancreas, spleen, thymus, prostate, testis, ovary, small intestine, colon and peripheral blood leukocytes. Not expressed in the kidney.
Source	Eukaryota
Contents	Each vial contains 50% glycerol, 0.9% NaCl, 0.2% Na ₂ HPO ₄ , 0.02% NaN ₃ .
Clone Names	Clone: 5G3
Immunogen	E.coli-derived human CRM1 recombinant protein (Position: N966-D1071). Human CRM1 shares 93.4% and 91.5% amino acid (aa) sequence identity with mouse and rat CRM1, respectively.
Cross Reactivity	No cross-reactivity with other proteins.
Storage	At -20°C for one year from date of receipt. Avoid repeated freezing and

thawing. Protect from light.

Protein Information

Name	XPO1
Synonyms	CRM1
Function	Mediates the nuclear export of cellular proteins (cargos) bearing a leucine-rich nuclear export signal (NES) and of RNAs. In the nucleus, in association with RANBP3, binds cooperatively to the NES on its target protein and to the GTPase RAN in its active GTP-bound form (Ran-GTP). Docking of this complex to the nuclear pore complex (NPC) is mediated through binding to nucleoporins. Upon transit of a nuclear export complex into the cytoplasm, disassembling of the complex and hydrolysis of Ran-GTP to Ran-GDP (induced by RANBP1 and RANGAP1, respectively) cause release of the cargo from the export receptor. The directionality of nuclear export is thought to be conferred by an asymmetric distribution of the GTP- and GDP-bound forms of Ran between the cytoplasm and nucleus. Involved in U3 snoRNA transport from Cajal bodies to nucleoli. Binds to late precursor U3 snoRNA bearing a TMG cap.
Cellular Location	Cytoplasm. Nucleus, nucleoplasm. Nucleus, Cajal body. Nucleus, nucleolus. Note=Located in the nucleoplasm, Cajal bodies and nucleoli. Shuttles between the nucleus/nucleolus and the cytoplasm
Tissue Location	Expressed in heart, brain, placenta, lung, liver, skeletal muscle, pancreas, spleen, thymus, prostate, testis, ovary, small intestine, colon and peripheral blood leukocytes. Not expressed in the kidney.

Background

Exportin 1 (XPO1), also known as chromosomal maintenance 1 (CRM1), is an eukaryotic protein that mapped to human chromosome 2p16 by fluorescence in situ hybridization. This protein mediates leucine-rich nuclear export signal (NES)-dependent protein transport. It specifically inhibits the nuclear export of Rev and U snRNAs. Additionally, this protein is involved in the control of several cellular processes by controlling the localization of cyclin B, MPAK, and MAPKAP kinase 2. It also regulates NFAT and AP-1.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.