

#### Anti-Human CRM1 DyLight® 488 conjugated XPO1 Antibody (monoclonal, 5G3) Catalog # ABO14787

#### Specification

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

Application Primary Accession Host Isotype Reactivity Clonality Format Description FC <u>O14980</u> Mouse Mouse IgG2b Human Monoclonal Liquid

Anti-Human CRM1 DyLight<sup>®</sup> 488 conjugated XPO1 Antibody (monoclonal, 5G3) . Tested in Flow Cytometry applications. This antibody reacts with Human.

### Anti-Human CRM1 DyLight $\ensuremath{\textcircled{B}}$ 488 conjugated XPO1 Antibody (monoclonal, 5G3) - Additional Information

Gene ID 7514

**Other Names** Exportin-1, Exp1, Chromosome region maintenance 1 protein homolog, XPO1, CRM1

**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.

Contents Each vial contains 50% glycerol, 0.9% NaCl, 0.2% Na2HPO4, 0.02% NaN3.

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.

## Anti-Human CRM1 DyLight<sup>®</sup> 488 conjugated XPO1 Antibody (monoclonal, 5G3) - 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.

#### Anti-Human CRM1 DyLight<sup>®</sup> 488 conjugated XPO1 Antibody (monoclonal, 5G3) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-Human CRM1 DyLight<sup>®</sup> 488 conjugated XPO1 Antibody (monoclonal, 5G3) - Images

## Anti-Human CRM1 DyLight<sup>®</sup> 488 conjugated XPO1 Antibody (monoclonal, 5G3) - 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.