

**Exportin-1/CRM1 (D6V7N) Rabbit mAb**

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**For Research Use Only. Not for Use in Diagnostic Procedures.**

<b>Applications:</b> W, IP, IHC-P, IF-IC	<b>Reactivity:</b> H M Mk	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 123	<b>Source/Isotype:</b> Rabbit IgG	<b>UniProt ID:</b> #O14980	<b>Entrez-Gene Id:</b> 7514
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**Product Usage Information****Application**

Western Blotting  
Immunoprecipitation  
Immunohistochemistry (Paraffin)  
Immunofluorescence (Immunocytochemistry)

**Dilution**

1:1000  
1:50  
1:300 - 1:1200  
1:400 - 1:1600

**Storage**

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

For a carrier free (BSA and azide free) version of this product see product #49000.

**Specificity/Sensitivity**

Exportin-1/CRM1 (D6V7N) Rabbit mAb recognizes endogenous levels of total exportin-1/CRM1 protein.

**Source / Purification**

Monoclonal antibody is produced by immunizing animals with recombinant protein specific to the carboxy terminus of human exportin-1/CRM1 protein.

**Background**

Exportins are a family of seven proteins that are responsible for intracellular transport. Exportin-1, also known as chromosome region maintenance 1 (CRM1), is a protein essential for nuclear export of hundreds of proteins, mRNAs, and rRNAs (1-3). Exportin-1 binds to substrates with nuclear export signals (NESs) rich in leucine and other hydrophobic amino acids (4). These hydrophobic sequences form an alpha-helix-loop that can bind to the exportin-1 hydrophobic groove (5). Studies have shown that these NESs can be modified either by protein modifications or by mutation to regulate exportin-1 binding (6-7). Targets of exportin-1 include many tumor suppressors, such as Rb, p53, FoxO1, BAF47, as well as oncoproteins, such as p21 and p27 (1). In addition, Myc can upregulate exportin-1 during biogenesis, where it can export newly formed 40S and 60S subunits from the nucleoli (8-9).

Inhibition of nuclear export has been pursued for therapeutic application since the finding that leptomycin B could suppress HIV replication by suppressing the ability of exportin-1 to export the HIV-1 protein Rev (2, 10). Overexpression of exportin-1 has been associated with poor prognosis in various cancer types (11-13). Genomic approaches and development of inhibitors have identified exportin-1 as a druggable target (14-16). The use of various inhibitors of exportin-1 is also being explored in various antiviral therapies (17-18).

**Background References**

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**Species Reactivity**

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

<b>Western Blot Buffer</b>	IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween@ 20 at 4°C with gentle shaking, overnight.
<b>Applications Key</b>	<b>W:</b> Western Blotting <b>IP:</b> Immunoprecipitation <b>IHC-P:</b> Immunohistochemistry (Paraffin) <b>IF-IC:</b> Immunofluorescence (Immunocytochemistry)
<b>Cross-Reactivity Key</b>	<b>H:</b> Human <b>M:</b> Mouse <b>Mk:</b> Monkey
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