

# Exportin 5 Antibody



**Orders:** 877-616-CELL (2355)  
orders@cellsignal.com

**Support:** 877-678-TECH (8324)

**Web:** info@cellsignal.com  
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H	Endogenous	136	Rabbit	#Q9HAV4	57510

## Product Usage Information

### Application

Western Blotting

### Dilution

1:1000

## Storage

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

## Specificity/Sensitivity

Exportin 5 Antibody recognizes endogenous levels of total exportin 5 protein.

## Species predicted to react based on 100% sequence homology

Hamster, Monkey, Bovine, Pig, Horse

## Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Leu182 of human exportin 5 protein. Antibodies are purified by protein A and peptide affinity chromatography.

## Background

Import and export through the nuclear envelope (NE) via facilitated translocation is important for many cellular processes including protein synthesis and miRNA biogenesis (1). Exportin 5 (XPO5) is a member of the importin β family of proteins (2) and functions in tRNA export in a sequence dependent fashion. More recently, it has been shown to export pre-miRNA by a RanGTPase-driven process from the nucleus to the cytoplasm, where pre-miRNA processing occurs to produce mature miRNAs (1,3). Study of the miRNA biosynthesis pathway is essential toward understanding the process of oncogenesis as global downregulation of miRNAs and the resulting alterations in expression of tumor suppressor and oncogenic proteins is a common phenotype of cancers cells (3,4). Research studies have shown that disruption of exportin 5 functions in many types of cancers including breast and lung, where pre-miRNA accumulates in the nucleus and miRNA maturation is impaired (2,3).

## Background References

1. Bohnsack, M.T. et al. (2004) *RNA* 10, 185-91.
2. Leaderer, D. et al. (2011) *Int J Mol Epidemiol Genet* 2, 9-18.
3. Melo, S.A. and Esteller, M. (2011) *Cell Cycle* 10, 922-5.
4. Melo, S.A. et al. (2010) *Cancer Cell* 18, 303-15.

## Species Reactivity

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

## Western Blot Buffer

**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.

## Applications Key

**W:** Western Blotting

## Cross-Reactivity Key

**H:** Human

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