Elab Fluor® 594-Rabbit Anti-Rat IgG(H+L)

catalog number: **E-AB-1152**

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

Description

Reactivity	Rat
Immunogen	Rat IgG
Host	Rabbit
Purification	Affinity purification
Conjugation	Elab Fluor® 594(Ex/Em:591 nm/614 nm)
Buffer	PBS with 0.1% Proclin300, 1% protective protein and 50% glycerol, pH 7.4.

Applications	Recommended Dilution
IF	1:150-1:300
FCM	1:250-1:500

Preparation & Storage

Storage	Store at -20°C Valid for 12 months. Avoid freeze/thaw cycles. Protected from prolonged exposure to light.
Shipping	Ice bag

Background

GTPase involved in nucleocytoplasmic transport, participating both to the import and the export from the nucleus of proteins and RNAs (PubMed:10400640, PubMed:17209048, PubMed:26272610, PubMed:27306458, PubMed:8276887, PubMed:8636225, PubMed:8692944, PubMed:8896452, PubMed:9351834, PubMed:9428644, PubMed:9822603). Switches between a cytoplasmic GDP- and a nuclear GTP-bound state by nucleotide exchange and GTP hydrolysis (PubMed:11336674, PubMed:26272610, PubMed:29040603, PubMed:7819259, PubMed:8636225, PubMed:8692944, PubMed:8896452, PubMed:9351834, PubMed:9428644, PubMed:9822603). Nuclear import receptors such as importin beta bind their substrates only in the absence of GTP-bound RAN and release them upon direct interaction with GTP-bound RAN, while export receptors behave in the opposite way. Thereby, RAN controls cargo loading and release by transport receptors in the proper compartment and ensures the directionality of the transport (PubMed:8896452, PubMed:9351834, PubMed:9428644). Interaction with RANBP1 induces a conformation change in the complex formed by XPO1 and RAN that triggers the release of the nuclear export signal of cargo proteins (PubMed:20485264). RAN (GTP-bound form) triggers microtubule assembly at mitotic chromosomes and is required for normal mitotic spindle assembly and chromosome segregation (PubMed:10408446, PubMed:29040603). Required for normal progress through mitosis (PubMed:12194828, PubMed:29040603, PubMed:8421051). The complex with BIRC5/survi

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