Recombinant eIF3G Monoclonal Antibody

catalog number: **AN301973L**

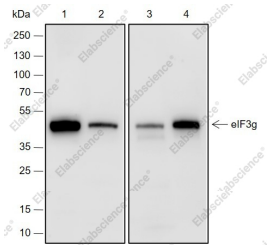
Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

Description

Reactivity	Human;Mouse;Rat
Immunogen	Peptide. This information is proprietary to PTMab
Host	Rabbit
Isotype	Rabbit IgG
Clone	C111594
Purification	Protein A affinity purification
Conjugation	Unconjugated
Buffer	PBS, 50% glycerol, 0.05% Proclin 300, 0.05% protein protectant.

Applications	Recommended Dilution
WB	1:1000-1:2000
IHC	1:50-1:100
IF	1:50-1:100
FCM	1:50

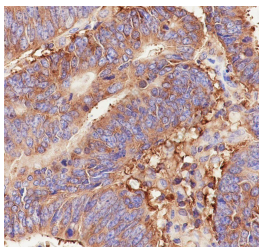
Data



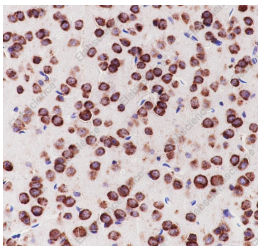
Western Blot with eIF3G Monoclonal Antibody at dilution of 1:2000. Lane 1: K562, Lane 2: 293T, Lane 3: NIH-3T3, Lane 4: PC-12

Observed-MW:40 kDa

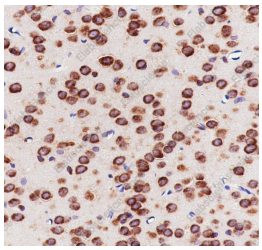
Calculated-MW:36 kDa



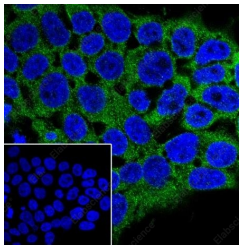
Immunohistochemistry of paraffin-embedded Human colon cancer using eIF3G Monoclonal Antibody at dilution of 1:100.



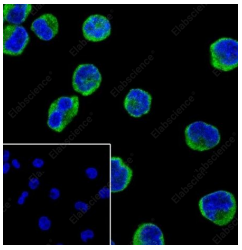
Immunohistochemistry of paraffin-embedded Mouse cerebrum using eIF3G Monoclonal Antibody at dilution of 1:100.



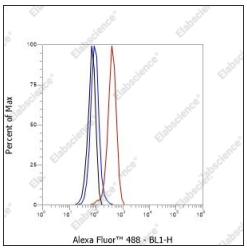
Immunohistochemistry of paraffin-embedded Rat cerebrum using eIF3G Monoclonal Antibody at dilution of 1:100.



Immunofluorescent analysis of (4% Paraformaldehyde) fixed 293T cells using anti-eIF3G Monoclonal Antibody at dilution of 1:100.



Immunofluorescent analysis of (4% Paraformaldehyde) fixed K-562 cells using anti-eIF3G Monoclonal Antibody at dilution of 1:100.



Flow cytometric analysis of human eIF3G expression on K-562 cells. Cells were stained with purified anti-Human eIF3G, then a Alexa Fluor 488-conjugated second step antibody. The histogram were derived from events with the forward and side light-scatter characteristics of intact cells.

Preparation & Storage

Storage	Store at -20°C Valid for 12 months. Avoid freeze/thaw cycles.
Shipping	Ice bag

Background

eIF3 is a large translation initiation complex with 10 to 13 different subunits. eIF3A, eIF3B, eIF3C, eIF3E, eIF3F, and eIF3H are the core subunits critical for the function of this complex. eIF3 physically interacts with eIF4G, which may be responsible for the association of the 40S ribosomal subunit with mRNA. eIF3 also stabilizes the binding of Met-tRNAf.eIF2. GTP to the 40S ribosomal subunit and helps keep the integrity of the resulting complex upon addition of the 60S ribosomal subunit. Studies have shown that mTOR interacts with eIF3 directly. When cells are stimulated by hormones or mitogenic signals, mTOR binds to the eIF3 complex and phosphorylates S6K1. This process results in the dissociation of S6K1 from eIF3 and S6K1 activation. The activated S6K1 then phosphorylates its downstream targets including ribosomal protein S6 and eIF4B, resulting in stimulation of translation. Further findings demonstrated that activated mTOR signaling induces the association of eIF3 with eIF4G upon stimulation with insulin.