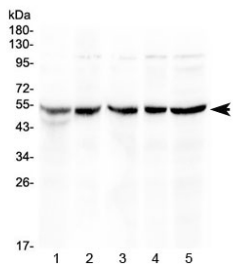
EIF3E Antibody / Translation Initiation Factor Antibody (R32741)

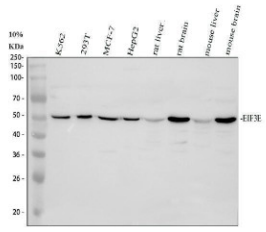
Catalog No.	Formulation	Size
R32741	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

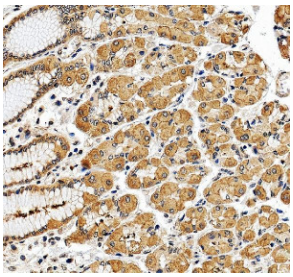
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P60228
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml Immunoprecipitation : 2ug per 500ug of lysate
Limitations	This EIF3E Antibody / Translation Initiation Factor Antibody is available for research use only.



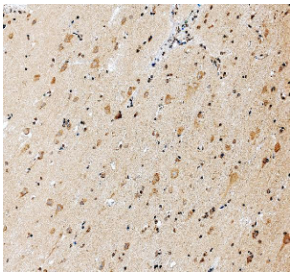
Western blot testing of 1) rat thymus, 2) mouse thymus, 3) mouse spleen, 4) human COLO320 and 5) human HeLa lysate with EIF3e antibody at 0.5ug/ml. Expected molecular weight: 48-52 kDa.



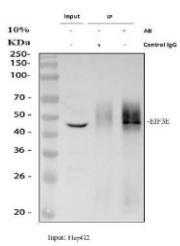
EIF3E Antibody Human, Rat and Mouse WB. Western blot analysis was performed using EIF3E Antibody. Lane 1: human K562 whole cell lysate; lane 2: human 293T whole cell lysate; lane 3: human MCF-7 whole cell lysate; lane 4: human HepG2 whole cell lysate; lane 5: rat liver tissue lysate; lane 6: rat brain tissue lysate; lane 7: mouse liver tissue lysate; lane 8: mouse brain tissue lysate. Proteins were separated on a 10% SDS-PAGE gel, transferred to a nitrocellulose membrane, and incubated with the primary antibody at 0.5 ug/ml overnight at 4Â°C. A specific immunoreactive band is detected at approximately 52 kDa in all tested samples, consistent with the expected molecular weight of EIF3E. These results demonstrate that this Translation Initiation Factor Antibody is suitable for Western blot detection of EIF3E across human, rat, and mouse tissues and cell lines.



EIF3E Antibody Human Stomach IHC. Immunohistochemistry was performed on FFPE human stomach tissue using EIF3E Antibody. Heat-induced epitope retrieval was performed in pH 8 EDTA buffer prior to incubation with the primary antibody at 2 ug/ml. Bound antibody was visualized using an HRP-conjugated goat anti-rabbit IgG secondary antibody with DAB chromogen. Strong cytoplasmic staining is observed in gastric glandular epithelial cells, while the adjacent surface epithelium shows comparatively weaker immunoreactivity, consistent with the widespread expression of EIF3E in metabolically active secretory cells. These results demonstrate that this Translation Initiation Factor Antibody is suitable for immunohistochemical detection of EIF3E in formalin-fixed, paraffin-embedded human stomach tissue.



EIF3E Antibody Human Cerebral Cortex IHC. Immunohistochemistry was performed on FFPE human cerebral cortex tissue using EIF3E Antibody. Heat-induced epitope retrieval was performed in pH 8 EDTA buffer prior to incubation with the primary antibody at 2 ug/ml. Bound antibody was visualized using an HRP-conjugated goat anti-rabbit IgG secondary antibody with DAB chromogen. Moderate cytoplasmic staining is observed throughout cortical neurons, with weaker staining in the surrounding neuropil, consistent with the widespread expression of EIF3E in metabolically active neural tissue. These results demonstrate that this Translation Initiation Factor Antibody is suitable for immunohistochemical detection of EIF3E in formalin-fixed, paraffin-embedded human brain tissue.



EIF3E Antibody HepG2 Cell IP. Immunoprecipitation was performed using EIF3E Antibody on HepG2 whole cell lysate. Lane 1: input HepG2 lysate (30 ug); lane 2: rabbit IgG immunoprecipitation control; lane 3: EIF3E immunoprecipitated from 500 ug of HepG2 lysate using 2 ug of EIF3E Antibody. The immunoprecipitated proteins were analyzed by Western blot with the same antibody at 0.5 ug/ml, followed by detection with an HRP-conjugated light chain-specific secondary antibody. A specific band is detected at approximately 52 kDa, consistent with the expected molecular weight of EIF3E, confirming efficient and specific immunoprecipitation. These results demonstrate that this Translation Initiation Factor Antibody is suitable for immunoprecipitation and Western blot detection of EIF3E.

Description

EIF3E Antibody recognizes eukaryotic translation initiation factor 3 subunit E (EIF3E), a core component of the eukaryotic translation initiation factor 3 complex that regulates the initiation phase of protein synthesis. EIF3E participates in assembly of the translation pre-initiation complex, recruitment of messenger RNA to the ribosome, and coordination of protein translation with cellular growth and environmental signaling. As one of the essential subunits of the multiprotein eIF3 complex, EIF3E contributes to efficient translation initiation while also participating in several cellular pathways beyond protein synthesis. NSJ Bioreagents supplies EIF3E Antibody to support reliable detection of this important translation initiation factor in diverse research applications.

EIF3E was originally identified as INT6, a gene disrupted by mouse mammary tumor virus integration, leading to early recognition of its involvement in cancer biology. Although it functions primarily within the translation initiation machinery, EIF3E also contributes to regulation of proteasome activity, DNA damage responses, cell cycle progression, and maintenance of cellular homeostasis. Through interactions with additional eIF3 subunits and numerous regulatory proteins, EIF3E helps coordinate selective messenger RNA translation with changing physiological conditions. Consequently, EIF3E Antibody is widely used to investigate translational control, stress responses, and mechanisms governing cell proliferation and differentiation.

Altered EIF3E expression has been associated with multiple malignancies, including breast, lung, colorectal, and ovarian cancers, where dysregulated translation contributes to tumor initiation and progression. Depending on cellular context, EIF3E has been reported to exhibit both tumor suppressive and oncogenic properties, reflecting its complex role in regulating protein synthesis and signaling pathways. In addition to oncology research, EIF3E is studied in developmental biology, neurobiology, and cellular stress responses because translational regulation is fundamental to virtually every aspect of cell function. EIF3E Antibody therefore represents a valuable reagent for investigations of cancer biology, gene expression, and protein synthesis.

An EIF3E Antibody provides dependable detection of this essential translation initiation factor in studies of ribosome assembly, messenger RNA translation, cellular signaling, and disease mechanisms. Its utility across Western blotting, immunohistochemistry, immunofluorescence, flow cytometry, and related applications makes an EIF3E Antibody an important tool for researchers investigating translational regulation and the molecular control of protein expression.

Learn more about proteins involved in cellular growth, protein synthesis, and homeostasis by visiting our Cell Biology Antibodies page.

Application Notes

Optimal dilution of the EIF3E Antibody / Translation Initiation Factor Antibody should be determined by the researcher.

Immunogen

Amino acids A160-Q241 from the human protein were used as the immunogen for the EIF3e antibody.

Storage

After reconstitution, the EIF3e antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

INT6 antibody, eIF3 Subunit E antibody, Eukaryotic Translation Initiation Factor 3 Subunit E antibody, Translation Initiation Factor eIF3e antibody, EIF3S6 antibody, p48 antibody

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