For Research Use Only

EIF4G1 Polyclonal antibody

Catalog Number:15704-1-AP Featured Product 46 Publications

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Basic Information

Catalog Number:
15704-1-AP

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG8342

GenBank Accession Number:
BC007788

GeneID (NCBI):
1981

UNIPROT ID:
Q04637

Full Name:
eukaryotic translation initiation factor 4 gamma, 1

Calculated MW:
1600 aa, 176 kDa

Observed MW:
230-250 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB: 1:2000-1:16000
IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC: 1:50-1:500
IF/ICC: 1:50-1:500

Applications

Tested Applications:
WB, IHC, IF/ICC, IP, ELISA

Cited Applications:
WB, IHC, IF, IP, CoIP, RIP, ELISA

Species Specificity:
human

Cited Species:
human, mouse, pig

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : BxPC-3 cells, HeLa cells, HepG2 cells

IP : HeLa cells,

IHC : human breast cancer tissue,

IF/ICC : HepG2 cells, Ethacrynic acid treated HepG2 cells

Background Information

Eukaryotic cellular messenger RNAs are posttranscriptionally modified by addition of an m(7)GTP moiety to the 5-prime terminus, referred to as a cap. Recognition of the cap structure and unwinding of mRNA secondary structure during the initiation phase of protein synthesis is catalyzed by initiation factors of the eIF4 group. EIF4G1, a subunit of eIF4 gamma, forms various complexes with the other eIF4 polypeptides [PMID: 7601469]. Mutations in the EIF4G1 gene, encoding a component of the eIF4F translation initiation complex, were recently reported as a possible cause for the autosomal dominant form of Parkinson's disease [PMID:22658323]. The calcualted molecular weight of EIF4G1 is 175 kDa, but modified EIF4G1 is about 220-240 kDa. (PMID: 18426977)

Notable Publications

Author	Pubmed ID	Journal	Application
Linyu Sun	34555354	Mol Cell	CoIP
Seokwon Jo	33115825	Diabetes	WB,IF
Seokwon Jo	36387851	Front Endocrinol (Lausanne)	WB

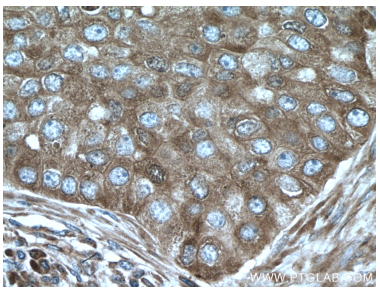
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

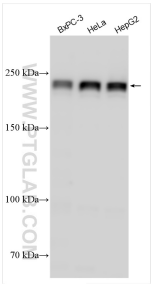
For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

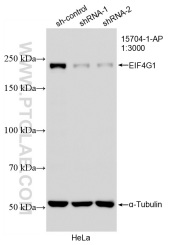
Selected Validation Data



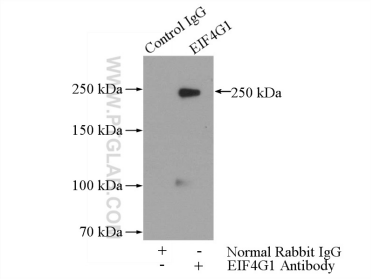
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 15704-1-AP (EIF4G1 antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



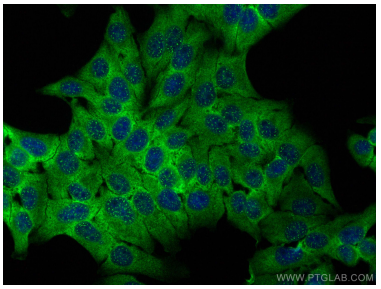
Various lysates were subjected to SDS PAGE followed by western blot with 15704-1-AP (EIF4G1 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



WB result of EIF4G1 antibody (15704-1-AP; 1:3000; incubated at room temperature for 1.5 hours) with sh-Control and sh-EIF4G1 transfected HeLa cells.



IP result of anti-EIF4G1 (IP:15704-1-AP, 5ug; Detection:15704-1-AP 1:500) with HeLa cells lysate 2000ug.



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using EIF4G1 antibody (15704-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2).