

For Research Use Only

SECISBP2 Polyclonal antibody

Catalog Number: 12798-1-AP

Featured Product

14 Publications



Basic Information

Catalog Number:
12798-1-AP

Size:
150ul, Concentration: 600 µg/ml by Nanodrop and 333 µg/ml by Bradford method using BSA as the standard;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG3541

GenBank Accession Number:
BC036109

GeneID (NCBI):
79048

UNIPROT ID:
Q96T21

Full Name:
SECIS binding protein 2

Calculated MW:
854 aa, 95 kDa

Observed MW:
95 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:500-1:2000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IF 1:20-1:200

Applications

Tested Applications:

WB, IP, IF, ELISA

Cited Applications:

WB, IF, IHC

Species Specificity:

human, mouse, rat

Cited Species:

human, rat, mouse, zebrafish

Positive Controls:

WB: HeLa cells, human kidney tissue, Jurkat cells

IP: mouse testis tissue,

IF: HeLa cells,

Background Information

Selenium (Se) is an essential trace element required for the biosynthesis of selenoproteins, and selenocysteine insertion sequence (SECIS) binding protein 2 (SECISBP2, or SBP2) represents a key trans-acting factor for the cotranslational insertion of selenocysteine into selenoproteins. Defects in SBP2 are a cause of abnormal thyroid hormone metabolism (ATHYHM) associated with a reduction in type II iodothyronine deiodinase activity. Mutations in this gene have been associated with a reduction in activity of a specific thyroxine deiodinase, a selenocysteine-containing enzyme, and abnormal thyroid hormone metabolism. Cells depleted of SBP2 have increased levels of ROS, which lead to cellular oxidative stress manifested as DNA lesions, stress granules, and lipid peroxidation, induction of caspase- and cytochrome c-dependent apoptosis, indicating that SBP2 is required for protection against ROS-induced cellular damage and cell survival.

Notable Publications

Author	Pubmed ID	Journal	Application
Zixin Min	30247797	J Cell Mol Med	IHC, WB
B Chellan	33122797	Sci Rep	WB
Aditi Dubey	27802322	PLoS One	WB

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

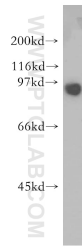
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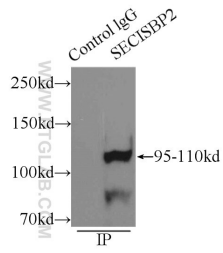
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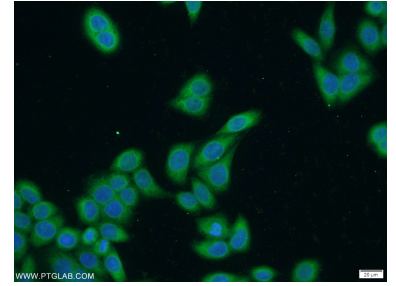
Selected Validation Data



HeLa cells were subjected to SDS PAGE followed by western blot with 12798-1-AP (SECISBP2 antibody) at dilution of 1:400 incubated at room temperature for 1.5 hours.



IP result of anti-SECISBP2 (IP:12798-1-AP, 3ug; Detection:12798-1-AP 1:600) with mouse testis tissue lysate 8000ug.



Immunofluorescent analysis of HeLa cells using 12798-1-AP (SECISBP2 antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).