



Rabbit Anti-GTPBP9 antibody

SL9554R

Product Name:	GTPBP9
Chinese Name:	鸟嘌呤核苷酸Binding protein9抗体
Alias:	DNA damage-regulated overexpressed in cancer 45 protein; DOC45; GBP45; GTP-binding protein 9 (putative); GTP-binding protein 9; GTP-binding protein PTD004; homologous yeast-44.2 protein; Obg like ATPase 1; Obg-like ATPase 1; OLA1; OLA1 HUMAN; PTD004.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Cow,Sheep,Fruit Fly,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1ug/TestICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	45kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human GTPBP9:151-250/396
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	GTP-binding protein 9 is a 396 amino acid protein that belongs to the Obg-related GTPase family under the translation factors (TRAFAC) class. Originally thought to only have GTPase activity, Obg-related GTPase family members have been shown to also have ATPase activity. In Homo sapians, GTPBP9 exhibits a preference for binding ATP

over GTP, with GTP binding occurring only at high nucleotide concentration. One cause for ATP affinity and GTP discrimination is thought to be a substitution of glutamine for a hydrophobic amino acid in Obg-related family members; this is the same substitution that inactivates Ras-like GTPases. GTPBP9 contains a C-terminal TGS domain that binds to ligands and an N-terminal G domain which binds nucleotides. GTPBP9 is expressed as three isoforms produced by alternative splicing.

Function:

Hydrolyzes ATP, and can also hydrolyze GTP with lower efficiency. Has lower affinity for GTP.

Subunit:

Monomer.

Subcellular Location:

Cytoplasm. Nucleus. Nucleus, nucleolus. Note=Predominantly cytoplasmic, shuttles between the nucleus and the cytoplasm.

Tissue Specificity:

Expressed in all tissues tested but its expression is more abundant in testis, liver, lung, and brain. Overexpressed in several malignancies, including cancers of the colon, rectum, ovary, lung, stomach, and uterus.

Similarity:

Belongs to the GTP1/OBG family.
Contains 1 G (guanine nucleotide-binding) domain.

SWISS:

Q9NTK5

Gene ID:

29789

Database links:

[Entrez Gene: 29789](#)Human

[Entrez Gene: 67059](#)Mouse

[Entrez Gene: 296488](#)Rat

[Omim: 611175](#)Human

[SwissProt: Q9NTK5](#)Human

[SwissProt: Q9CZ30](#)Mouse

[SwissProt: A0JPJ7](#)Rat

[Unigene: 157351](#)Human

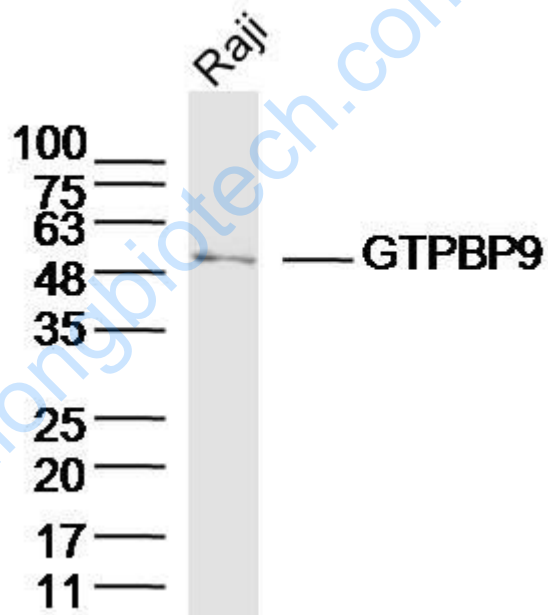
[Unigene: 22661](#)Mouse

[Unigene: 5874](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:



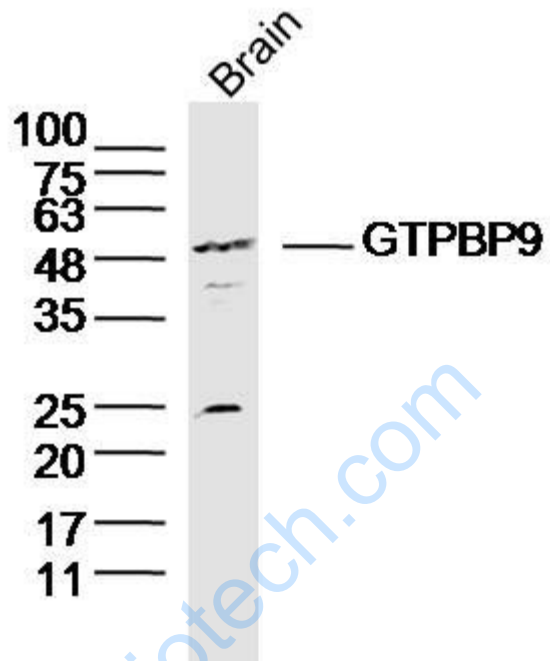
Sample: Raji Cell (Human) Lysate at 30 ug

Primary: Anti-GTPBP9 (SL9554R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 45kD

Observed band size: 50kD



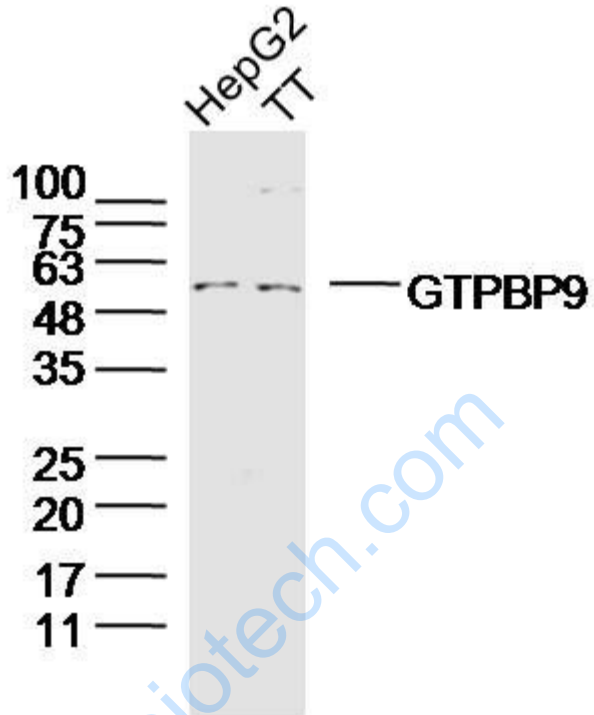
Sample: Brain (Mouse) Lysate at 40 ug

Primary: Anti-GTPBP9 (SL9554R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 45kD

Observed band size: 50kD



Sample:

HepG2 Cell (Human) Lysate at 30 ug

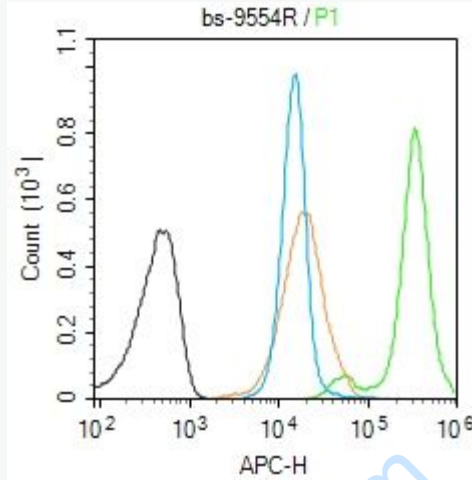
TT Cell (Human) Lysate at 30 ug

Primary: Anti-GTPBP9 (SL9554R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 45kD

Observed band size: 50kD



Blank control (Black line): Molt4 (Black).

Primary Antibody (green line): Rabbit Anti-GTPBP9 antibody (SL9554R)

Dilution: 1 µg / 10⁶ cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody (white blue line): Goat anti-rabbit IgG-AF647

Dilution: 1 µg / test.

Protocol

The cells were fixed with 4% PFA (10min at room temperature) and then permeabilized with 90% ice-cold methanol for 20 min at room temperature. The cells were then incubated in 5% BSA to block non-specific protein-protein interactions for 30 min at room temperature. Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.