## For Research Use Only

## TFG Monoclonal antibody

Catalog Number: 66916-1-Ig



**Basic Information** 

Catalog Number: GenBank Accession Number:

66916-1-Ig BC023599
Size: GeneID (NCBI):

150ul , Concentration: 1500 ug/ml by 10342 Nanodrop and 1000 ug/ml by Bradford<sub>UNIPROT ID</sub>: method using BSA as the standard; Q92734

Source: Full Name:
Mouse TRK-fused gene
Isotype: Calculated MW:
IgG2b 400 aa, 43 kDa
Immunogen Catalog Number: Observed MW:
AG27697 50-55 kDa

Purification Method:

Protein A purification

CloneNo.: 1B5B9

Recommended Dilutions:

WB 1:1000-1:4000 IHC 1:50-1:500

**Applications** 

Tested Applications: WB, IHC, ELISA

Species Specificity:

Human, 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: NCI-H1299 cells, A549 cells, MCF-7 cells, HEK-293

cells, PC-3 cells, LNCaP cells

IHC : human breast cancer tissue, human prostate

cancer tissue

## **Background Information**

Protein TFG (TRK-fused gene protein) plays a role in regulating phosphotyrosine-specific phosphatase-1 activity. Mutations in TFG may have important clinical relevance for current therapeutic strategies to treat metastatic melanoma. Defects in TFG are a cause of thyroid papillary carcinoma (TPC), a common tumor of the thyroid that typically arises as an irregular, solid or cystic mass from otherwise normal thyroid tissue. Hereditary motor and sensory neuropathy with proximal dominant involvement (HMSN-P) is an autosomal-dominant neurodegenerative disorder characterized by widespread fasciculations, proximal-predominant muscle weakness, and atrophy followed by distal sensory involvement. Recent genetic investigation indicates that formation of TFG-containing cytoplasmic inclusions and concomitant mislocalization of TAR DNA-binding protein 43 kDa (TDP-43) underlie motor neuron degeneration in HMSN-P. Pathological overlap of proteinopathies involving TFG and TDP-43 highlights a new pathway leading to motor neuron degeneration.

Storage

Storage:

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

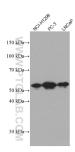
Storage Buffer:

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

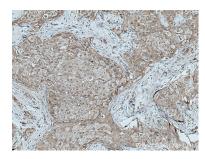
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

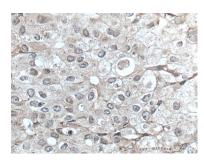
## **Selected Validation Data**



Various lysates were subjected to SDS PAGE followed by western blot with 66916-1-1g (TFG antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded human breast cancer tissue slide using 66916-1-1g (TFG antibody) at dilution of 1:200 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human breast cancer tissue slide using 66916-1-1g (TFG antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).