

# Product Datasheet

## TFG Antibody (TFG-03) - BSA Free NBP2-62212

Unit Size: 0.1 mg

Store at 4C. Do not freeze.

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### Publications: 6

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**NBP2-62212**

TFG Antibody (TFG-03) - BSA Free

<b>Product Information</b>	
<b>Unit Size</b>	0.1 mg
<b>Concentration</b>	Please see the vial label for concentration. If unlisted please contact technical services.
<b>Storage</b>	Store at 4C. Do not freeze.
<b>Clonality</b>	Monoclonal
<b>Clone</b>	TFG-03
<b>Preservative</b>	15mM Sodium Azide
<b>Isotype</b>	IgG2b
<b>Purity</b>	Protein A purified
<b>Buffer</b>	Phosphate buffered saline (PBS), pH 7.4
<b>Target Molecular Weight</b>	50 kDa

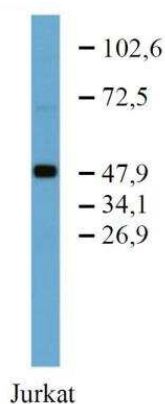
<b>Product Description</b>	
<b>Description</b>	Novus Biologicals Mouse TFG Antibody (TFG-03) - BSA Free (NBP2-62212) is a monoclonal antibody validated for use in WB, ICC/IF and IP. Anti-TFG Antibody: Cited in 4 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
<b>Host</b>	Mouse
<b>Gene ID</b>	10342
<b>Gene Symbol</b>	TFG
<b>Species</b>	Human
<b>Specificity/Sensitivity</b>	The antibody MEM-57 reacts with gamma-epsilon and delta-epsilon dimers of human CD3 complex, a part of a bigger multisubunit T cell receptor complex (CD3/TCR) expressed on peripheral blood T lymphocytes and mature thymocytes.
<b>Immunogen</b>	Human recombinant protein Trx-his-NTFG

<b>Product Application Details</b>	
<b>Applications</b>	Western Blot, Immunocytochemistry/ Immunofluorescence, Immunoprecipitation
<b>Recommended Dilutions</b>	Western Blot 1:100-1:2000, Immunocytochemistry/ Immunofluorescence, Immunoprecipitation 1:10-1:500

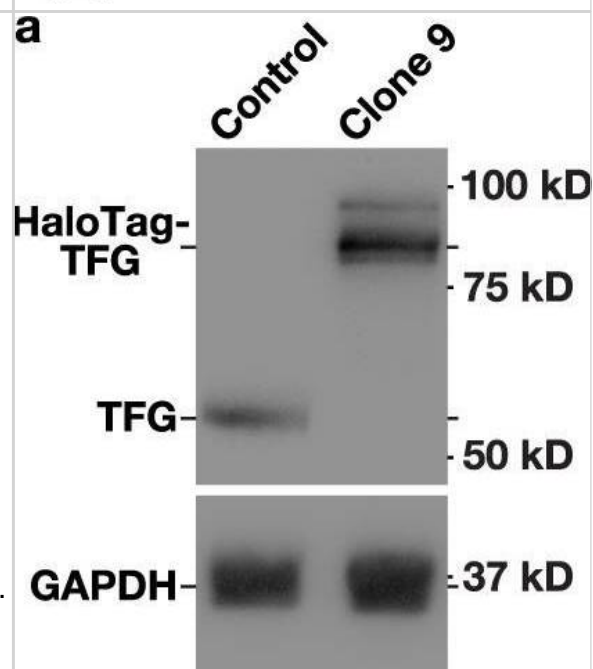


## Images

Western Blot: TFG Antibody (TFG-03) [NBP2-62212] - Analysis of TFG in Jurkat cell lysate using anti-TFG (TFG-03) purified.



Engineering human cell lines to study native COPII dynamics. **a** Representative immunoblots ( $n = 3$ ) of extracts generated from control and clonal CRISPR/Cas9 edited cells using antibodies directed against TFG (top) and GAPDH (bottom). **b** Representative confocal images of cell lines natively expressing HaloTag fusion proteins after labeling with JFX650-HaloTag ligand are shown. Insets show 3x zoomed regions (boxed). Bar, 10  $\mu\text{m}$ . **c** Representative super resolution images of fixed cells expressing HaloTag fusion proteins labeled with the JFX650-HaloTag ligand (magenta) and co-stained using antibodies directed against Sec24a (green). Color-coded linescans highlighting their relative localizations are shown (right). Bar, 500 nm. **d** Confocal imaging of edited cell lines (HaloTag-Sec16a, green; HaloTag-Sec23a, light blue; HaloTag-Sec31a, purple; HaloTag-TFG, salmon) co-expressing either ss-DsRed (top) or ManII-SBP-GFP (bottom) was used to monitor their synchronous release from the ER. Based on fluorescence intensity, the percentage of each cargo present within the perinuclear region relative to its maximal accumulation there was quantified over time. Error bars represent mean  $\pm$  SEM ( $n = 20$  cells each; 3 biological replicates each). \*\*\* $p = 0.0003$ , \*\* $p = 0.0082$ , and \* $p = 0.0260$ , as calculated using a two-way ANOVA and Dunnett's multiple comparison test. **e** Confocal microscopy was used to monitor the fluorescence recovery of HaloTag-Sec16a labeled with JFX650-HaloTag ligand after partial photobleaching ( $n = 20$ ; 3 biological replicates). Error, as displayed by green-colored bands around the smoothed tread line, represents mean  $\pm$  SEM. Based on the recovery curve, the mobile fraction (Mf) and half-time of recovery ( $t_{1/2}$ ) were determined. Source data are provided as a Source Data file. Image collected and cropped by CiteAb from the following open publication (<https://pubmed.ncbi.nlm.nih.gov/38066006>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



## Publications

William Kasberg, Peter Luong, Kevin A. Swift, Anjon Audhya Nutrient deprivation alters the rate of COPII subunit recruitment at ER subdomains to tune secretory protein transport Nature Communications 2023-12-08 [PMID: 38066006]

Kasberg W TFG tunes Sec23 assembly rates to achieve rapid and productive COPII transport intermediate biogenesis Thesis 2023-01-01

Kasberg W, Luong P, Swift K, Audhya A Nutrient deprivation alters the rate of COPII coat assembly to tune secretory protein transport Research square 2023-03-17 [PMID: 36993182] (WB, Human)

Kasberg W, Luong P, Hanna MG et al. The Sar1 GTPase is dispensable for COPII-dependent cargo export from the ER Cell reports 2023-06-09 [PMID: 37300835] (ICC/IF, WB, Human)

William K, Peter L, Michael GH et al The Sar1 GTPase Is Dispensable for COPII-Dependent Cargo Export From the ER SSRN Electronic Journal 2022-11-20

Carinci M, Testa B, Bordi M et al. TFG binds LC3C to regulate ULK1 localization and autophagosome formation The EMBO journal 2021-05-17 [PMID: 33932238]





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### **Products Related to NBP2-62212**

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NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB7539	Goat anti-Mouse IgG (H+L) Secondary Antibody [HRP]
NBP2-27231	Mouse IgG2b Isotype Control (MPC-11)

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### **Limitations**

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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