

Datasheet for MB-067-1000**10X TBS Fish Gel Concentrate****Overview**

Description:	10X TBS Fish Gel Concentrate (Azide and Mercury free) 10-PACK (10 x 100 ml) - MB-067-1000
Item No.:	MB-067-1000
Size:	10 x 100 mL
Applications:	ELISA, Biochemical Assay, IF, Multiplex, Other

Product Details

Background:	Highly sensitive ELISA assays require minimal non-specific interactions. Non-specific binding results in elevated background levels and a decrease in signal-to-noise ratios. Blocking reagents act to minimize non-specific interactions of secondary reactants with each other and with the primary solid phase binding sites. Rockland offers several options for antibody diluents in multiple buffer configurations that effectively block non-specific interactions and minimize background. Multiple formulations offer greater flexibility in experimental design.
Synonyms:	10X TBS Fish Gel Concentrate (Azide and Mercury free), 10X TBS Solution, 10X Fish Gel Solution

Target Details

Purity/Specificity:	This product was aseptically filtered through a Millipore 0.22 micron filter into clean, pre-sterilized containers. The product was tested on trypticase soy agar for 24 hours, 48 hours and 72 hours and was found to be negative for bacteria.
Relevant Links:	MB-067 SDS

Application Details

Tested Applications:	ELISA
Suggested Applications:	Biochemical Assay, IF, Multiplex, Other (Based on references)
Application Note:	This product is a 10X concentrated stock solution. Prepare a 1X working solution by diluting 1 part 10X concentrate with 9 parts distilled-deionized water or equivalent. 10X TBS Fish Gel Concentrate consists of 1.0 M Tris hydrochloride, 1.5 M sodium chloride and Fish Gelatin at pH 7.5. A proprietary combination of stabilizers and preservatives are used that are azide and mercury free.

Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	User Optimized
WB:	User Optimized

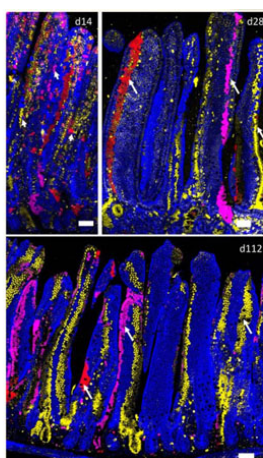
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	10X
Buffer:	See application note.

Shipping & Handling

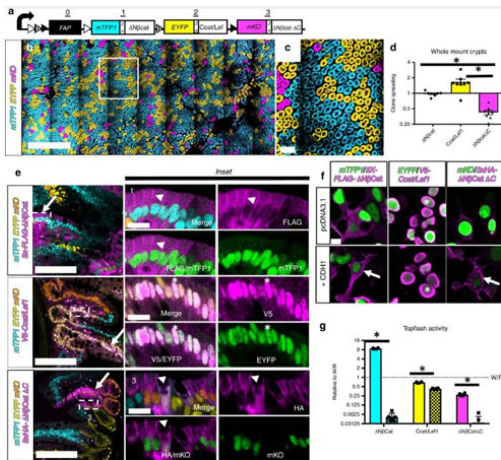
Shipping Condition:	Wet Ice
Storage Condition:	Store container at 4° C before opening. Protect from moisture and light. No special shipping conditions or precautions are required.
Expiration:	Expiration date is six (6) months from date of receipt.

Images



Immunofluorescence Microscopy

LGR5-rainbow lineage tracing. LBOW mice were crossed to ROSA-CreER/T2 mice and intraperitoneally injected with 200 mg/kg tamoxifen every other day for a total of three injections. Mice (n = 4–6/time point) were chased for 14, 28, 56, 112, 224, or 365 days. The small intestine was harvested, sectioned with a Vibratome, fixed and permeabilized in FISHX comprising fish gelatin extract (p/n MB-067-0100) and 0.2% Triton-X-100 for 30 min, stained for EYFP and mCherry/E2-Crimson (p/n 600-401-379), and processed. Sections from each mouse intestine were tile-imaged by confocal microscopy. A subset of each tiled image that is representative for days 14 (d14), 28 (d28), and 112 (d112) is presented. (mKO1, blue; EYFP, yellow; mCherry, red; E2-Crimson, magenta) (scale bars, 50 μ m). Small arrows depict small patches of clones, whereas large arrows depict full-length large clones. Figure 9. PMID: 28275053.



Immunofluorescence Microscopy

Widespread expansion of oncogenic clones during perinatal development. **a** Diagram of MCAT-Crainbow mice.

b MCATVilCre small intestine (N = 10 mice, 3–6 weeks of age) prepared as a wholemount and confocal imaged. **c** Inset in “b” at higher magnification. **d** MCATVilCre Crypts were color segmented, counted and normalized to the positional bias calculated in NCATVilCre mice. Asterisk denotes statistical significance by one-way ANOVA (mTFP1 vs. EYFP: $p = 0.003$, mTFP1 vs. mKO: $p = 0.016$, EYFP vs. mKO = $3e-6$).

e Immunostaining for FLAG, V5, or HA epitopes (magenta) specific to each β cat isoform in MCATVilCre small intestine vibratome slices and merged with fluorescent lineage markers (mTFP1: cyan, EYFP: yellow, and mKO: orange). Arrows denote isoform expression with cognate lineage reporter (FLAG and mTFP1, V5 and EYFP, and HA and mKO). Corresponding insets depict higher magnification images. Arrowheads denote membrane-localized β cat, whereas asterisk denotes nuclear-localized β cat. Epitope stains (magenta) are also presented as merged and as a single-channel image with its cognate fluorescent lineage reporter (green).

f HEK cells were transiently transfected with MCAT isoforms, fixed, stained, and imaged for the indicated epitope (magenta) and fluorescent reporter (green). Cells were also cotransfected with epithelial cadherin (CDH1) as indicated. Arrows denote sequestration of β cat at the plasma membrane, and the asterisk denotes nuclear β cat. **g** Wnt signalling activity for each oncogene in the absence of CDH1 (solid bar) or in the presence of overexpressed CDH1 (hatched bar) (N = 6 wells per condition and independently repeated in four experiments). TOP FLASH activity was normalized to WNT/RSPO-stimulated control cells (dashed line). Asterisk denotes statistical significance by two-way ANOVA and Bonferroni’s multiple comparisons test (cyan < $1e-6$, yellow = 0.01, magenta = 0.02). (SEM included for each graph). Scale Bars = 1 mm in b, 100 μ m in c/e, 15 μ m in e: insets 1–3, and 10 μ m in f. Cells were fixed at room temperature for 15 min in 4% PFA, washed once with PBS, and permeabilized/blocked in FISHX (0.25% Triton-X diluted in 1% Fish Gelatin (p/n MB-067-0100)) for 20 min at room temperature. Fig. 3. PMID: 31792216.

**Bottle**

10X TBS Fish Gel Concentrate (Azide and Mercury free)

References

- Boone PG et al. A cancer rainbow mouse for visualizing the functional genomics of oncogenic clonal expansion. *Nat Commun.* (2019)
- Snyder et al. Inhibiting clathrin-mediated endocytosis of the leucine-rich G protein-coupled receptor-5 diminishes cell fitness. *Journal of Biological Chemistry* (2017)

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.