

Datasheet for 110-4101**Mouse Serum Antibody****Overview**

Description:	Anti-Mouse Serum (RABBIT) Antibody - 110-4101
Item No.:	110-4101
Size:	2 mL
Applications:	Cellular Assay
Reactivity:	Mouse
Host Species:	Rabbit

Product Details

Background:	Anti-Mouse Serum antibody detects mouse serum proteins. Serum proteins are those proteins remaining in portion of plasma after coagulation of blood, during which process the plasma protein fibrinogen is converted to fibrin and remains behind in the clot. Anti-Mouse Serum antibody is ideal for investigators involved in Cell Signaling, cellular biology and Signal Transduction research.
Synonyms:	rabbit Anti-mouse whole serum, rabbit anti-mouse serum, anti-serum, detect mouse serum proteins
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	Antiserum

Target Details

Gene Name:	Alb
Reactivity:	Mouse
Immunogen Type:	Native Protein
Immunogen:	Mouse serum proteins
Purity/Specificity:	Anti-MOUSE SERUM (RABBIT) Antibody was prepared from polyspecific antiserum by a delipidation and defibrination. Assay by immunoelectrophoresis resulted in a single precipitin arc against Mouse IgG, and multiple precipitin arcs against Mouse Serum.

Relevant Links: • [UniProtKB - P07724](#)

Application Details

Suggested Applications:	Cellular Assay (Based on references)
Application Note:	Anti-MOUSE SERUM (RABBIT) Antibody is suitable for immunoprecipitation, immunodiffusion, conjugation and most immunological methods requiring high titer and specificity. Anti-MOUSE SERUM (RABBIT) Antibody is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. Specific conditions should be optimized by user.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	User Optimized
IP:	User Optimized
WB:	User Optimized

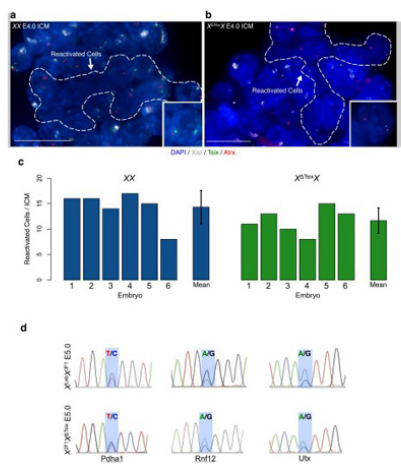
Formulation

Physical State:	Lyophilized
Concentration:	100 mg/mL by Refractometry
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	None
Stabilizer:	None
Reconstitution Volume:	2.0 mL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images

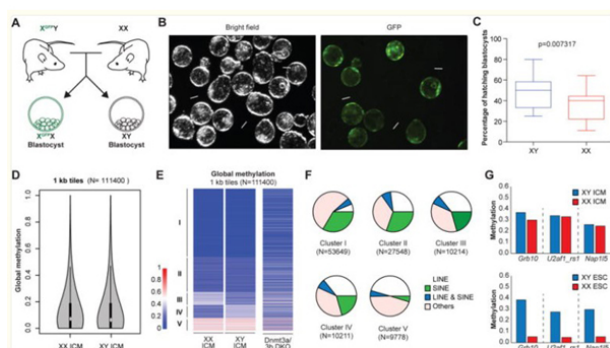


Immunofluorescence Microscopy

To isolate the inner cell mass (ICM) of E4.0 embryos, embryos were incubated in pre-warmed rabbit anti-mouse serum (Rockland Immunochemicals, #110–4101) at a 1:5 dilution in M2 medium for 1 hr in a humid chamber at 37°C.

Reactivation of the inactive XΔTsix paternal X-chromosome in the inner cell mass (ICM).

RNA FISH detection of Xist (white), Tsix (green), and Atrx (red) RNAs in E4.0 ICMs. Nuclei are stained blue with DAPI. Insets show representative reactivated nuclei. Scale bar, 20 μm. (c) Quantification of the number of reactivated nuclei, as characterized by loss of Xist RNA coating and biallelic Atrx expression, in individual ICMs (n=6 ICMs per genotype). The mean number of reactivated cells per ICM does not differ significantly between XX and XXΔTsix ICMs ($p = 0.23$, two-tailed T-test). Error bars, S.D. (d) Allele-specific X-linked gene expression analysis in E5.0 epiblast cells. Representative chromatograms of sequenced cDNAs show biallelic expression of the X-linked genes Pdha1, Rnf12, and Utx, regardless of genotype. Fig 7. PMID: 24979243



Immunofluorescence Microscopy

To isolate the inner cell mass (ICM) zona pellucida, blastocysts were transferred through a series of drops containing Rabbit polyclonal anti-mouse serum antibody (110-4101) and left in the final drop for 30 minutes at 37°C. (A) Schematic of the generation of XGFPX and XY blastocysts.

(B) (Left) Representative bright field image of XGFPX and XY blastocysts and (right) GFP-positive XGFPX blastocysts are shown. White arrows indicate hatching XY blastocysts. (C) The percentage of hatching XGFPX and XY blastocysts from the same litter is plotted. 123 XGFPX and 104 XY blastocysts from 11 independent litters were scored. Data is judged to be statistically significant when $p < 0.05$ by two-tailed Student's T-TEST.

(D) Global methylation analysis of pooled XX (n=29) and XY (n=20) ICMs by RRBS using violin plot representation.

(E) Comparison of genome-wide DNA methylation patterns by RRBS in XX and XY ICMs. Global methylation patterns are classified into 5 clusters. Dnmt3a/b DKO cell line was included as a control.

(F) Compositions of each cluster from Figure 3E are shown as pie charts.

(G) Average methylation levels across imprinting control regions (ICRs) for indicated loci from ICM (top; 20 XY and 29 XX ICMs) and ESC (bottom; 3 XY and 3 XX lines) cells.

Fig 3. PMID: 28366588

References

- Choi et al. DUSP9 Modulates DNA Hypomethylation in Female Mouse Pluripotent Stem Cells. *Cell Stem Cell* (2017)
- Maclary E et al. Differentiation-dependent requirement of Tsix long non-coding RNA in imprinted X-chromosome inactivation. *Nat Commun.* (2014)

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.