

Transcriptional Regulator ERG (9FY)

Mouse anti-human ERG Monoclonal Antibody (Clone 9FY)

REFERENCES AND PRESENTATIONS¹

 ready-to-use (manual or LabVision AutoStainer)

MAD-000609QD-3 MAD-000609QD-7 MAD-000609QD-12

Ready-to-use (MD-Stainer)²
 MAD-000609QD-3/V
 MAD-000609QD/V

concentrated
MAD-000609Q - 1:20 recommended dilution

COMPOSITION

Anti-human ERG mouse monoclonal antibody purified from serum and prepared in 10mM PBS, pH 7.4, with 0.2% BSA and 0.09% sodium azide

INTENDED USE Immunohistochemistry (IHC) on paraffin embedded tissues. Not tested on frozen tissues or Western-Blotting

CLONE: 9FY

Ig ISOTYPE: Mouse IgG1

SPECIES REACTIVITY: In vitro diagnostics in humans.

Not tested in other species

DESCRIPTION AND APPLICATIONS:

TMPRSS2:ERG is the most prevalent gene rearrangement in prostate cancers leading to overexpression of a truncated ERG protein in a subset of prostate cancers. ERG expression is also reported in high-grade prostatic intraepithelial neoplasia (PIN). Publications suggest that the prevalence of the TMPRSS2:ERG rearrangement in prostate cancer cases ranges from ~25% to 70%1,3. ERG is expressed in many tissues including vascular tumors.

IHC POSITIVE CONTROL: Endotelial cells VISUALIZATION: Nuclear

- ¹ These references are for presentation in vials of Low Density Polyethylene (LDPE) dropper. In case the products are used in automated stainers, a special reference is assigned as follows:
- / L: Cylindrical screw-cap vials (QD-3 / L, QD-7 / L, QD-12 / L).
 / N: Polygonal screw-cap vials (QD-3 / N, QD-7 / N, QD-12 / N).
 For different presentations (references / volumes) please contact the supplier.
- ² For Technical specifications for MD-Stainer, please contact your distributor.

IHC RECOMMENDED PROCEDURE:

- 4μm thick section should be taken on charged slides; dry overnight at 60°C
- Deparaffinise, rehydrate and HIER (heat induced epitope retrieval) boil tissue in the Pt Module using Vitro S.A EDTA buffer pH8³ for 20 min at 95°C. Upon completion rinse with 3-5 changes of distilled or deionised water followed by cooling at RT for 20 min
- Endogenous peroxidase block Blocking for 10 minutes at room temperature using peroxidase solution (ref. MAD-021540Q-125)
- Primary antibody: incubate for 20 minutes [The antibody dilution (when concentrated) and protocol may vary depending on the specimen preparation and specific application. Optimal conditions should be determined by the individual laboratory]
- For detection use Master Polymer Plus Detection System (HRP) (DAB included; ref. MAD-000237QK)
- Counterstaining with haematoxylin and final mounting of the slide

STORAGE AND STABILITY: ✓ Stored at 2-8°C. Do not freeze. ☐ Once the packaging has been opened it can be stored until the expiration date of the reagent indicated on the label. If the reagent has been stored under other conditions to those indicated in this document, the user must first check its correct performance taking into account the product warranty is no longer valid.

WARNINGS AND PRECAUTIONS:

- 1. Avoid contact of reagents with eyes and mucous membranes. If reagents come into contact with sensitive areas, wash with copious amounts of water.
- 2. This product is harmful if swallowed.
- 3. Consult local or state authorities with regard to recommended method of disposal.
- 4. Avoid microbial contamination of reagents.

SAFETY RECOMMENDATIONS

This product is intended for laboratory professional use only. The product is NOT intended to be used as a drug or for domestic purposes. The current version of the Safety Data Sheet for this product can be downloaded by searching the reference number at

³ Ref: MAD-004072R/D



Spain)





<u>www.vitro.bio</u> or can be requested at <u>regulatory@vitro.bio</u>.

BIBLIOGRAPHY

- 1. Miettinen M, Wang ZF, Paetau A, Tan SH, Dobi A, Srivastava S, Sesterhenn I. ERG transcription factor as an immunohistochemical marker for vascular endothelial tumors and prostatic carcinoma. Am J Surg Pathol. 2011 Mar;35(3):432-41
- 2. Yaskiv O, Rubin BP, He H, Falzarano S, Magi-Galluzzi C, Zhou M. ERG protein expression in human tumors detected with a rabbit monoclonal antibody. Am J Clin Pathol. 2012 Dec;138(6):803-10
- 3. Yaskiv O, Zhang X, Simmerman K, Daly T, He H, Falzarano S, Chen L, Magi-Galluzzi C, Zhou M. The utility of ERG/P63 double immunohistochemical staining in the diagnosis of limited cancer in prostate needle biopsies. Am J Surg Pathol. 2011 Jul;35(7):1062-8
- 4. Falzarano SM, Zhou M, Carver P, Tsuzuki T, Simmerman K, He H, Magi-Galluzzi C. ERG gene rearrangement status in prostate cancer detected by immunohistochemistry. Virchows Arch. 2011 Oct;459(4):441-7
- 5. Chaux A, Albadine R, Toubaji A, Hicks J, Meeker A, Platz EA, De Marzo AM, Netto GJ. Immunohistochemistry for ERG expression as a surrogate for TMPRSS2-ERG fusion detection in prostatic adenocarcinomas. Am J Surg Pathol. 2011 Jul;35(7):1014-20
- 6. Tomlins SA, Palanisamy N, Siddiqui J, Chinnaiyan AM, Kunju LP. Antibody-based detection of ERG rearrangements in prostate core biopsies, including diagnostically challenging cases: ERG staining in prostate core biopsie . Arch Pathol Lab Med. 2012 Aug;136(8):935-46
- 7. Shah RB, Tadros Y, Brummell B, Zhou M. The diagnostic use of ERG in resolving an "atypical glands suspicious for cancer" diagnosis in prostate biopsies beyond that provided by basal cell and α -methylacyl-CoA-racemase markers. Hum Pathol. 2013 May;44(5):786-94
- 8. Williamson SR, Zhang S, Yao JL, Huang J, Lopez-Beltran A, Shen S, Osunkoya AO, MacLennan GT, Montironi R, Cheng L. ERG-TMPRSS2 rearrangement is shared by concurrent prostatic adenocarcinoma and prostatic small cell carcinoma and absent in small cell carcinoma of the urinary bladder: evidence supporting monoclonal origin. Mod Pathol. 2011 Aug;24(8):1120-7
- 9. Wang WL, Patel NR, Caragea M, Hogendoorn PC, López-Terrada D, Hornick JL, Lazar AJ. Expression of ERG, an Ets family transcription factor, identifies ERG-rearranged Ewing sarcoma. Mod Pathol. 2012 Oct;25(10):1378-83
- 10. He H, Osunkoya AO, Carver P, Falzarano S, Klein E, Magi-Galluzzi C, Zhou M. Expression of ERG protein, a

prostate cancer specific marker, in high grade prostatic intraepithelial neoplasia (HGPIN): lack of utility to stratify cancer risks associated with HGPIN. BJU Int. 2012 Dec;110(11 Pt B):E751-5

LABEL AND BOX SYMBOLS

Explanation of the symbols of the product label and box:

\square	Expiration date
Î	Temperature limit
**	Manufacturer
Σ	Sufficient content for <n> assays</n>
REF	Catalog number
LOT	Lot code
[]i	Refer to the instructions of
	use
IVD	Medical product for in
	vitro diagnosis.
e-SDS	Material safety data sheet



(F IVD