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Androgen Receptor (AR-V7 Specific) Antibody



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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: WB	Reactivity: H	Sensitivity: Endogenous	MW (kDa): 80	Source: Rabbit	UniProt ID: #P10275-3	Entrez-Gene Id 367	
Product Usage Information	Ap	Application			Dilution		
	We	Western Blotting			1:1000		
Storage		plied in 10 mM sodi C. Do not aliquot the	VI VI	5), 150 mM NaCl, 10	00 μg/ml BSA and 50% ç	ylycerol. Store at –	
Specificity / Sensitivity Androgen Receptor (AR-V7 Specific) An antibody does not cross-react with full-le			' '	body recognizes endogenous levels of total AR-V7 protein. This gth AR protein.			
Source / Purifica	resi	Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Leu639 of human androgen receptor (V7 isoform) protein. Antibodies are purified by protein A and peptide affinity chromatography.					

Background

Androgen receptor (AR), a zinc finger transcription factor belonging to the nuclear receptor superfamily, is activated by phosphorylation and dimerization upon ligand binding (1). This promotes nuclear localization and binding of AR to androgen response elements in androgen target genes. Research studies have shown that AR plays a crucial role in several stages of male development and the progression of prostate cancer (2,3).

The AR3 or AR-V7 isoform, which lacks the typical ligand binding domain, is created through the alternative splicing of cryptic exons (4-5). AR-V7 is frequently expressed in castration-resistant prostate cancer (CRPC) and while dependent on the activity of the full-length androgen receptor (AR-FL), AR-V7 can activate a completely distinct transcriptional program (6-8). While enzalutamide and abiraterone have been beneficial in treating CRPC through the ligand binding domain of AR-FL, resistance in patients has been shown to be associated with AR-V7 detection in circulating tumor cells (9-12). Studies probing into mechanisms of overcoming this resistance are currently being explored and may help in stratifying patient populations for more personalized therapies (13-15).

Background References

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- 13. Liu, C. et al. (2014) Clin Cancer Res 20, 3198-210.
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Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

WB: Western Blotting

Cross-Reactivity Key

Androgen Receptor (AR-V7 Specific) Antibody (#68492) Datasheet Without Images Cell Signaling Techno...

H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus Mi: mink C: chicken Dm: D. melanogaster X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Sc: S. cerevisiae Ce: C. elegans Hr: horse GP: Guinea Pig Rab: rabbit All: all species expected

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