

# RNAscope® Probes for Long Non-Coding Genes

Get probes for your gene of interest designed and manufactured in two weeks.

## Featured Publications using RNAscope® Technology

*The LINK-A lncRNA activates normoxic HIF1α signalling in triple-negative breast cancer.* Lin et. al. Nat Cell Biol. 2016 Jan PMID: 26751287

*A novel RNA in situ hybridization assay for the long noncoding RNA SchLAP1 predicts poor clinical outcome after radical prostatectomy in clinically localized prostate cancer.* Mehra et. al. Neoplasia 2014 Dec PMID: 25499224

*The long noncoding RNA SchLAP1 promotes aggressive prostate cancer and antagonizes the SWI/SNF complex.* Prensner et. al. Nat. Genet. 2013 Nov PMID: 24076601

*lncRNA BCAR4 wires up signaling transduction in breast cancer.* Xing et. al. RNA Biol 2015 May PMID: 26016563

*Long non-coding RNA chromogenic in situ hybridisation signal pattern correlation with breast tumour pathology.* Zhang et. al. J Clin Pathol. 2015 Aug PMID: 26323944

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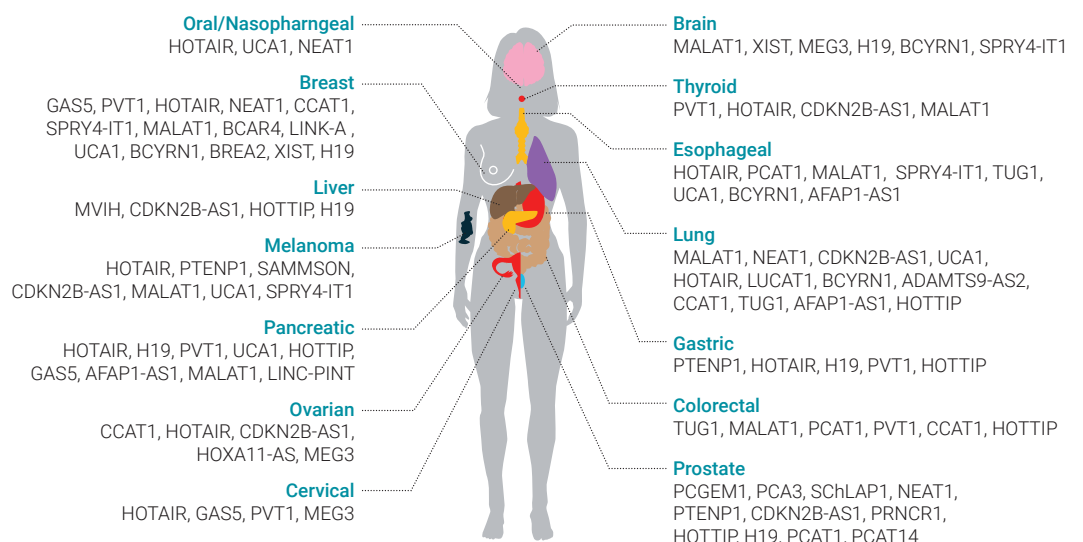


MOLECULAR DETECTION +  
MORPHOLOGICAL CONTEXT  
IN A SINGLE ASSAY

## RNAscope® Probes for Detection of Long Non-Coding RNA

The human genome contains approximately 25,000 noncoding RNAs, surpassing the number of protein-coding genes. The majority of these non-coding RNAs are long non-coding RNAs (lncRNAs), which are greater than 200 nucleotides in length. lncRNAs are involved in many biological processes, including epigenetic modification, cell differentiation, development, maintenance of cellular pluripotency, and apoptosis. In addition, lncRNAs play prominent roles in a multitude of human diseases, including Alzheimer's disease, schizophrenia, and cancer. Several lncRNAs have been identified as potential prognostic markers in a wide variety of human cancers. Because lncRNAs cannot be detected by Immunohistochemistry (IHC), an alternative detection method is required to identify lncRNAs with morphological context.

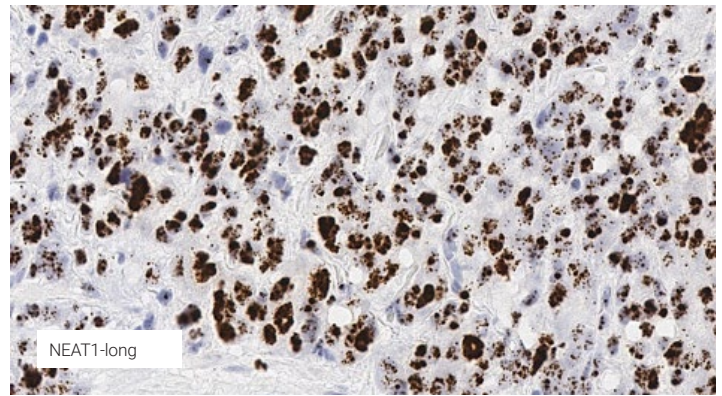
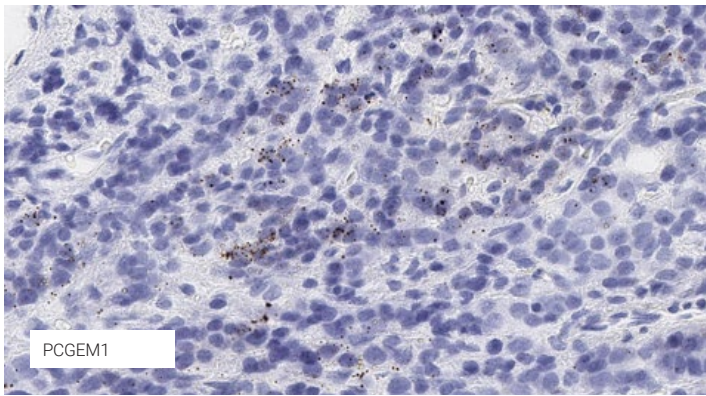
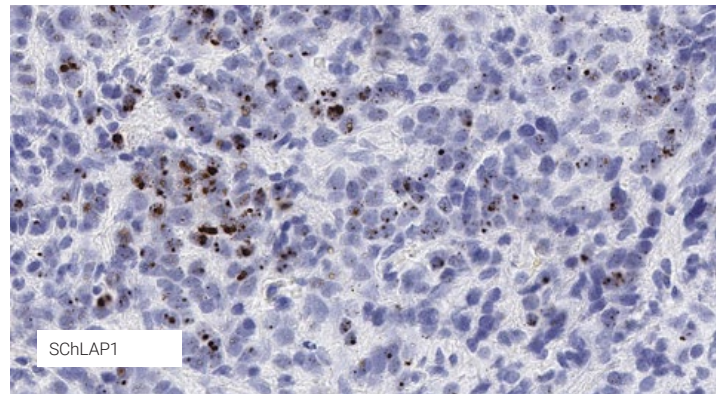
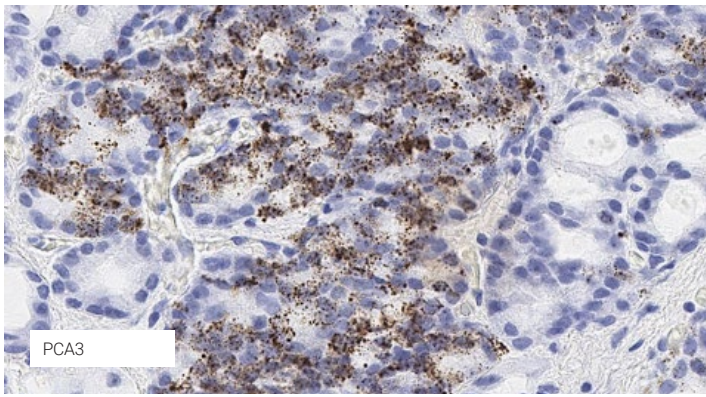
The RNAscope® assay is a unique RNA *in situ* hybridization (ISH) technology that provides single-cell gene expression resolution with spatial and morphological context. The RNAscope® assay detects mRNA and long non-coding RNA in fresh frozen, fresh fixed, and formalin-fixed paraffin-embedded cells and tissues. The RNAscope® assay utilizes a unique probe design strategy that allows for visualization of target RNA as a single dot, where each dot is an individual RNA molecule. The RNAscope® technology offers the key benefits of high sensitivity and specificity, resulting in a high signal-to-noise ratio in target gene expression.



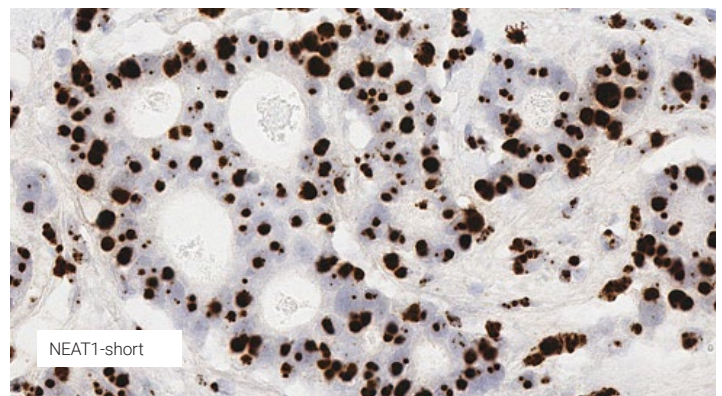
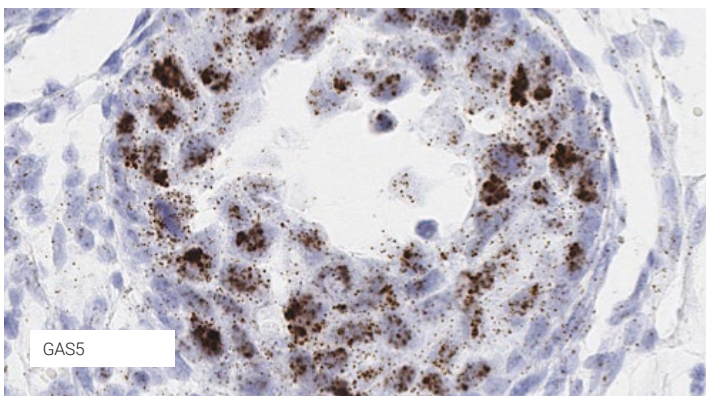
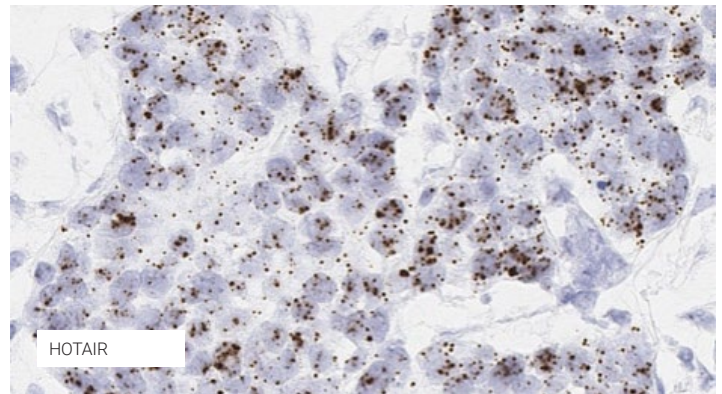
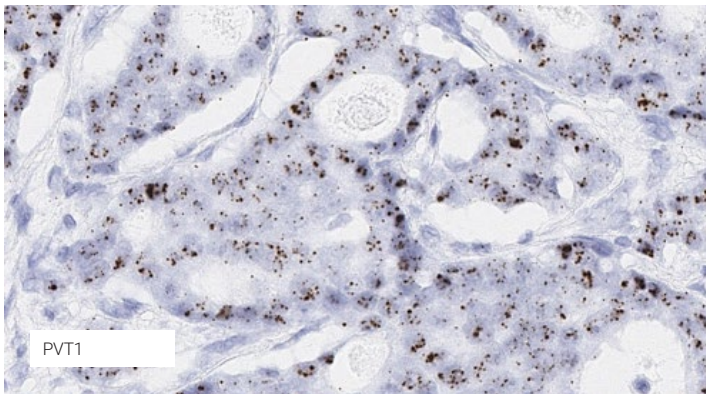
Visualize your long non-coding RNA today [www.acdbio.com/non-coding-rna](http://www.acdbio.com/non-coding-rna)



DETECTION OF LNCRNA TARGETS IN HUMAN PROSTATE CANCER SAMPLES USING RNASCOPE® 2.5 HD ASSAY-BROWN

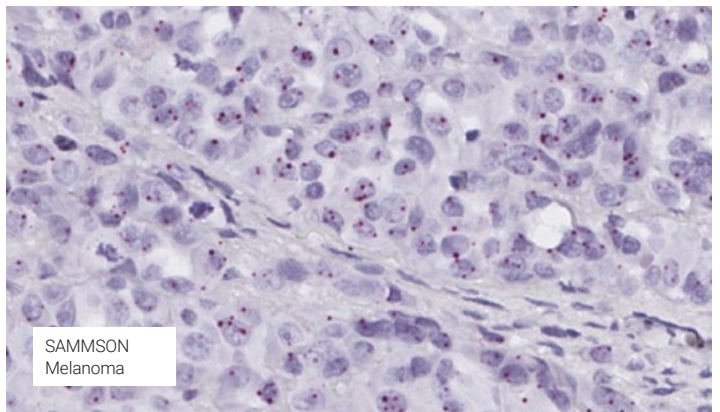
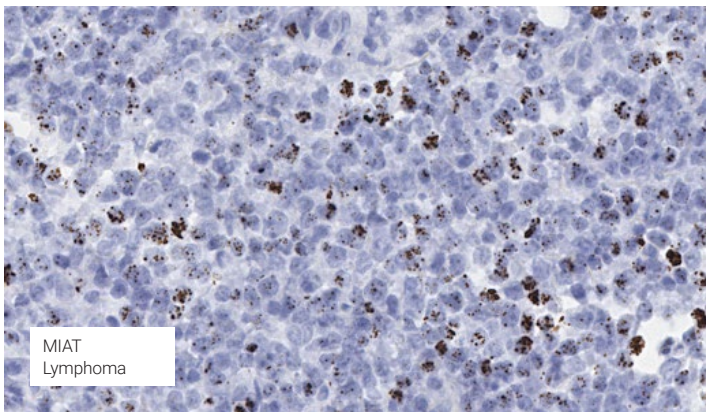
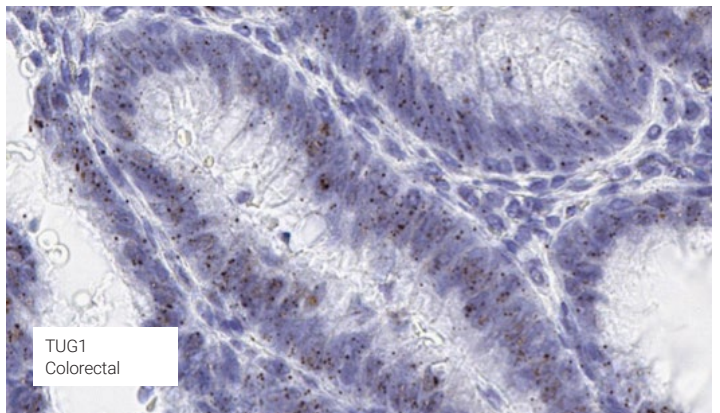
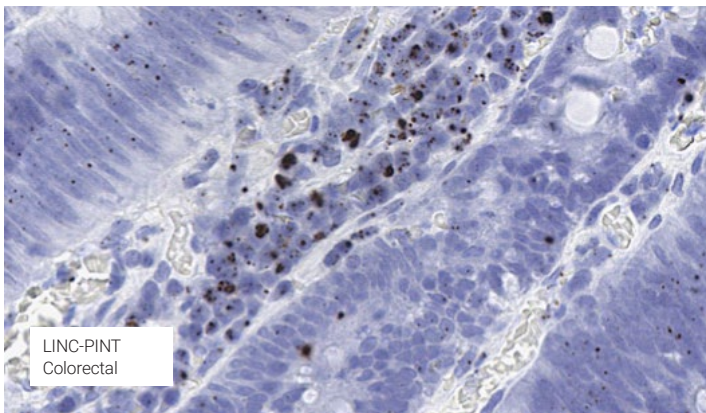
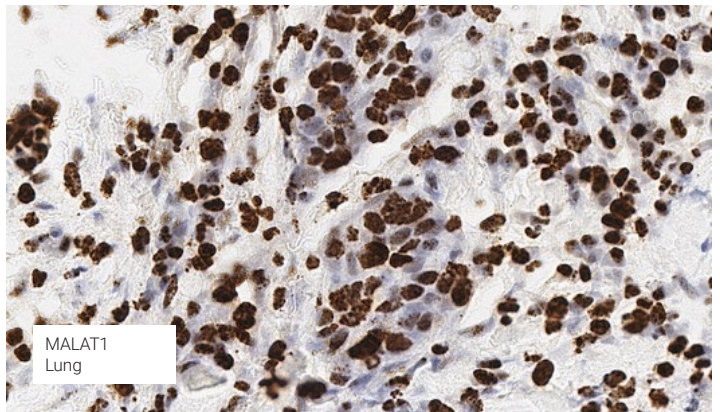
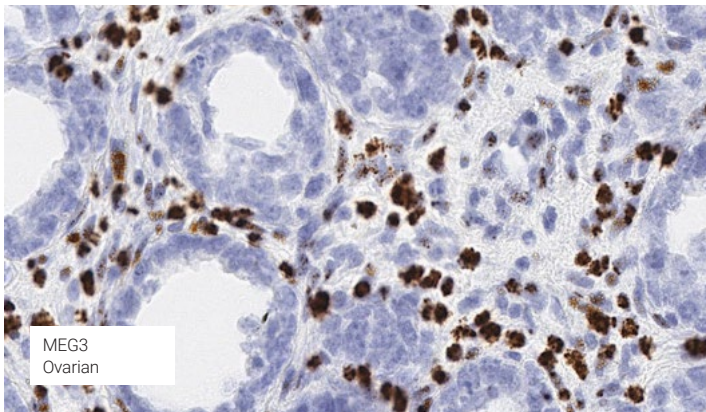
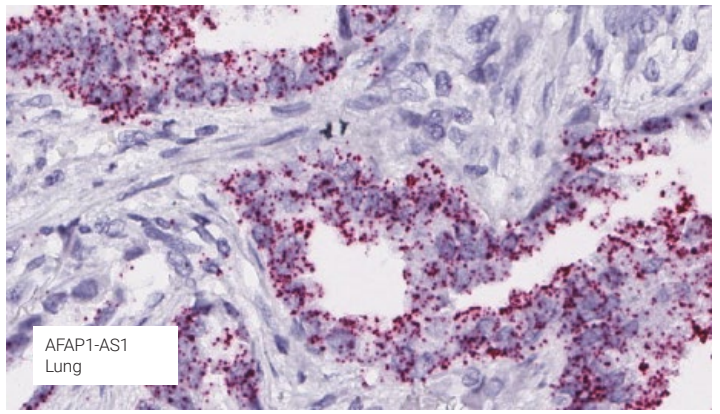
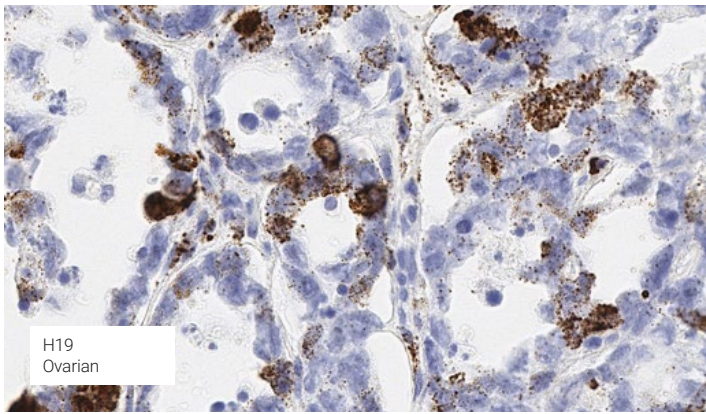


DETECTION OF LNCRNA TARGETS IN HUMAN BREAST CANCER SAMPLES USING RNASCOPE® 2.5 HD ASSAY-BROWN



\*NEAT1-long and NEAT1-short targets individual regions of the same gene







## RNAscope® for Long Non-Coding Genes

Probe details are available at [www.acdbio.com/probesearch](http://www.acdbio.com/probesearch)

Catalog No.	Probe Name	Catalog No.	Probe Name	Catalog No.	Probe Name	Catalog No.	Probe Name
449031	Hs-ADAMTS9-AS2	427421	Hs-HOTAIRM1	455861	Hs-LOC100132735	407761	Hs-PTENP1
432631	Hs-AFAP1-AS1	400131	Hs-HOTTIP	402111	Hs-LOC100506013	406951	Hs-PVT1
433501	Hs-AOC4P	456401	Hs-HOXA11-AS	424271	Hs-LOC100507412	445471	Hs-PXN-AS1
527481	Hs-ATXN3	452531	Hs-HOXB-AS3-NoTv1Tv4	453871	Hs-LOC100507506	465571	Hs-RAD21-AS1
407771	Hs-BCAR4	400791	Hs-HOXB-AS51	425401	Hs-LOC100507639	452021	Hs-RAD51-AS1
425791	Hs-BCYRN1 (BC200)	457101	Hs-HOXC-AS3	455241	Hs-LOC157273	315401	Hs-RoR
445031	Hs-BIN3-IT1	410631	Hs-KCNQ10T1	412021	Hs-LOC339535 (LINK-A)	415531	Hs-RP11-255G12-lincRNA
447881	Hs-BLACAT1	451021	Hs-KDM4A-AS1	436111	Hs-LOC400043	482271	Hs-SAMMSON
409311	Hs-BREA2	454501	Hs-LHFPL3-AS2	445111	Hs-LUCAT1 (SCAL1)	313861	Hs-SCHLAP1
457091	Hs-CASC9	464401	Hs-LINC00152	445121	Hs-LUCAT1-tv1	477651	Hs-SOX2-OT
444431	Hs-CCAT1	408221	Hs-LINC00162	400811	Hs-MALAT1	413511	Hs-SPRY4-IT1
417661	Hs-CDKN2B-AS1 (ANRIL)	464821	Hs-LINC00473	400821	Hs-MEG3	437891	Hs-TINCR
472451	Hs-CDKN2B-AS1-E5-E7	442551	Hs-LINC00473-tv1	476941	Hs-MEG8	410221	Hs-TRERNA1
556371	Hs-CHN1	462131	Hs-LINC00515	467131	Hs-MESTIT1	451231	Hs-TUG1
407081	Hs-CLEC4GP1	456831	Hs-LINC00538	458501	Hs-MIAT	417521	Hs-UCA1
433511	Hs-CPS1-IT1	462021	Hs-LINC00589	450341	Hs-MIR155HG	410491	Hs-UNK-ncRNA
453181	Hs-CTA-204B4.6	411081	Hs-LINC00704	426751	Hs-MIR503	311231	Hs-XIST
550331	Hs-CYP3A5	418261	Hs-LINC00707	424281	Hs-MNX1-AS1	410641	Hs-ZFAS1
418031	Hs-DANCR	436581	Hs-LINC00839	475051	Hs-NAALADL2-AS3		
414691	Hs-DISC2	456461	Hs-LINC00844	477641	Hs-NBAT1		
468041	Hs-DLEU1	442271	Hs-LINC00887	430321	Hs-NBR2		
421101	Hs-DUX4L-X-family	471461	Hs-LINC00941	468941	Hs-NCBP2-AS2		
437031	Hs-EGFR-AS1	478601	Hs-LINC00958	582241	Hs-NDRG4		
477661	Hs-EMX2OS	456551	Hs-LINC01133	411541	Hs-NEAT1-long		
460171	Hs-FENDRR-tv1	463941	Hs-LINC01212	411531	Hs-NEAT1-short		
459151	Hs-FLJ32255	477501	Hs-LINC01262	314781	Hs-NR_015410		
447301	Hs-GAS5	452131	Hs-LINC01296	554091	Hs-P2RX7		
457581	Hs-GAS5-O1	468101	Hs-LINC01546	312201	Hs-PCA3		
437851	Hs-GDNF-AS1-LongNcTv	404761	Hs-Linc-KLF14-1	313851	Hs-PCAT1		
400771	Hs-H19	477631	Hs-LINC-PINT	451431	Hs-PCAT14		
458511	Hs-HCP5	423581	Hs-LNCL22	409321	Hs-PCGEM1		
312341	Hs-HOTAIR	475881	Hs-lnc-FAM164A-1	409331	Hs-PRNCR1		

ACD offers an ever-growing selection of RNA ISH probes. Don't see your gene of interest? RNAscope® Made-to-Order Target Probes are manufactured within 2 weeks for virtually ANY gene from ANY species in ANY tissue. Learn more at [www.acdbio.com/target-probes-made-order](http://www.acdbio.com/target-probes-made-order)

Visualize your long non-coding RNA today [www.acdbio.com/non-coding-rna](http://www.acdbio.com/non-coding-rna)



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