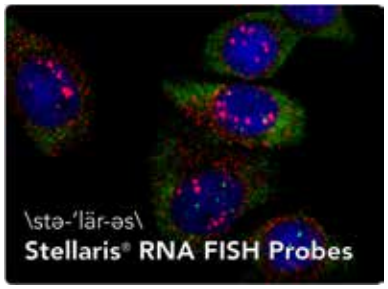
\stə-'lär-əs\

Stellaris® RNA FISH Probes

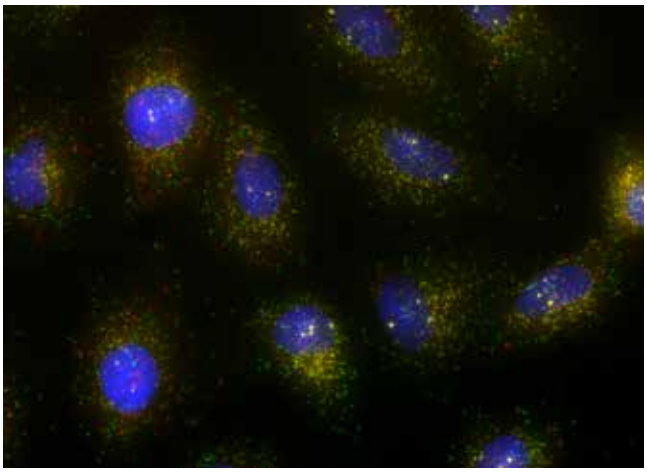


Catalogued Stellaris FISH Probe Sets

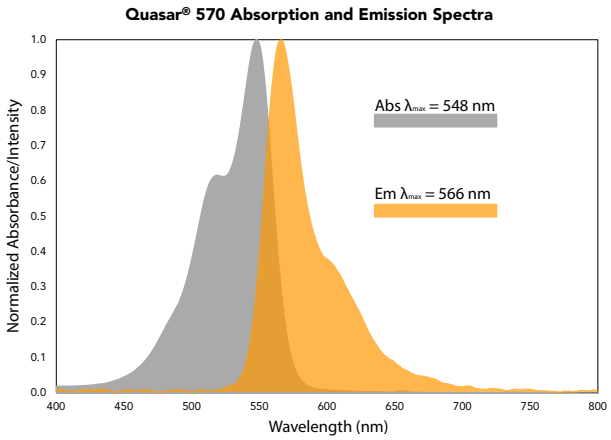
Biosearch Technologies' catalogued assays for Stellaris RNA FISH significantly improve ease of use for the Stellaris technology by providing convenient positive controls, and reducing uncertainty associated with designing an untested probe set against a new RNA target. Scientists can use these products to pursue research using RNA FISH and combine them into multiplexed assays with probes targeting other RNA transcripts or even protein targets. All catalogued Stellaris probe sets use Quasar® 570 dyes and have a final delivered amount of 1 nmol, which yields approximately 80 hybridizations under standard conditions. Target-specific details and current protocols are available online at: www.biosearchtech.com/stellarisprotocols.

Foundation Genes		
Catalog #	**Gene Target**	**Species**
SMF-2026-1	GAPDH	Human
SMF-2006-1	TFRC	Human
SMF-3002-1	Gapdh	Mouse
SMF-3007-1	Tfrc	Mouse

Long Noncoding RNA (lncRNA) Targets		
Catalog #	**Gene Target**	**Species**
SMF-2035-1	MALAT1	Human
SMF-2036-1	NEAT1 5′ Segment	Human
SMF-2037-1	NEAT1 Middle Segment	Human
SMF-2038-1	XIST	Human
SMF-3008-1	Malat1	Mouse
SMF-3009-1	Neat1 5' Segment	Mouse
SMF-3010-1	Neat1 Middle Segment	Mouse
SMF-3011-1	Xist	Mouse



Multiplex Stellaris RNA FISH of EGFR mRNA (Quasar 570; yellow), POLR2A mRNA (CAL Fluor® Red 610; red), and TOP1 mRNA (Quasar 670; green) in A549 cells.



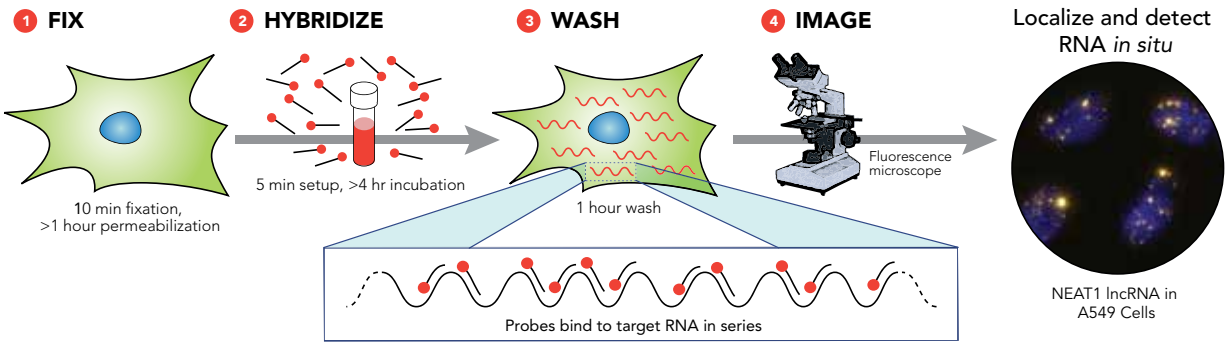
Browse through our Stellaris Image Gallery at
www.biosearchtech.com/stellarisgallery

www.biosearchtech.com/stellaris

BIOSEARCH® TECHNOLOGIES
Advancing Nucleic Acid Technology℠

The Stellaris RNA FISH Method

The Stellaris FISH protocol is comparatively simple, and consists of four steps, as shown in the image below. No exotic reagents are required, and the entire process can be completed in less than a day.



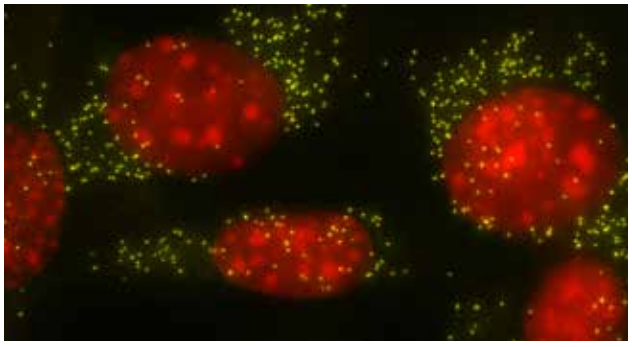
Foundation Genes for Solid Science

Stellaris RNA FISH is a powerful tool for visualizing gene expression at the cellular and subcellular levels. Biosearch supplies designed probe sets for "foundation genes" so that you can build reliable gene expression experiments that will stand up to scrutiny.

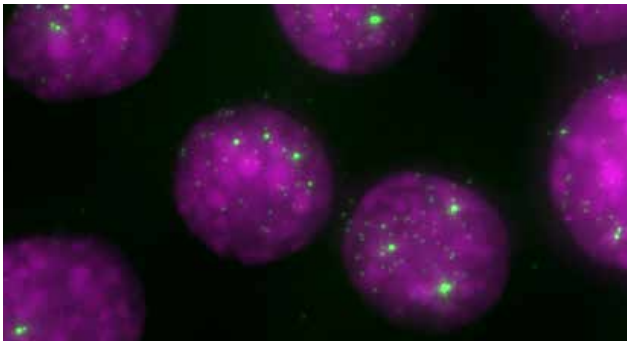
Foundation genes were carefully selected on the basis of essential single copy genes with broad expression across cell types. In short, they are more than reference genes– they provide a basis for unshakeable science.

Long Noncoding RNA

Long noncoding RNA (lncRNA) present unique challenges for researchers, due to the lack of protein products and, typically, the existence of multiple splice variants. Biosearch offers carefully designed probe sets for the detection of select lncRNA targets, including NEAT1, MALAT1 and XIST. Localization of lncRNA with these probe sets shows clear compartmentalization of NEAT1 to nuclear paraspeckles, and MALAT1 to nuclear speckles.



Stellaris RNA FISH using Mouse Tfrc (SMF-3007-1) in NIH 3T3 cells. Tfrc spots are pseudo-colored in yellow and nuclei in red.



Stellaris RNA FISH for the long non-coding RNA, Neat1 (SMF-3009-1) in Neuro-2a cells. Neat1 spots are pseudo-colored in green and nuclei in magenta.

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