



Immune avoidance is one of the primary mechanisms employed by cancer cells to escape destruction. Using this technique, malignant cells disguise themselves as benign so they're undetectable by immunoprotective agents. Cancer cells can accomplish immune avoidance in several ways. One method involves the expression of certain cell surface proteins - usually found on healthy cells - that falsely label cancer cells as normal, allowing them to proliferate and metastasize without immune interference.

PD-1 is a receptor expressed on the surface of activated T-cells. PD-1's ligands, PD-L1 and PD-L2, are found on the surface of certain dendritic cells, macrophages, and antigen-presenting cells. Binding of PD-1 to its ligands halts T-cell response. In healthy individuals, this prevents T-cells, who normally function to destroy pathogens, from killing healthy tissues. But cancer cells can abuse this interaction, and are known to overexpress PD-L1 and PD-L2 in order to dodge immune detection.

Empire Genomics' fluorescent in situ hybridization (FISH) probes have been used by researchers and clinicians around the world to test for PD-L1/L2 aberrations. Our probes, which are designed to hybridize to a target gene or chromosomal region, can reveal the degree of PD-L1/L2 gene amplification in malignant cells. Each probe comes in a set of 20 tests, and normally ships within 7-10 business days.

GENES	LOCATION / STS	DYE COLOR	SKU
PD-L1/Con 9	9p24.1/9q21.33	● ●	PDL1-CON9-20-ORGR
PD-L2/Con 9	9p24.1/9q21.33	● ●	PDL2-CON9-20-ORGR
PD-L1/PD-L2/Con 9	9p24.1/9q21.33	● ● ●	PDL1-PDL2-CON9-20-GRORAQ

To View Our PDL FISH Probe Panel
visit www.empiregenomics.com/PDL or call (716) 856-3873

Source: Wang, Yiting, et al. "Regulation of PD-L1: emerging routes for targeting tumor immune evasion." *Frontiers in pharmacology* 9 (2018).