Caprico Biotechnologies

A Great Tool for Drug Screening Model: Monoclonal Antibody Recognizing Wild Type Conformational Structure of p53

p53 mutations are found in approximately half of all human cancers. **p53** is activated in response to DNA damage. Mutated p53 proteins lose their normal, tumor suppressing function.

PC14586 is a first-in-class, small molecule p53 reactivator designed to selectively bind to the crevice present in the p53 Y220C mutant protein, hence, restoring the wild-type, or normal, p53 protein structure and tumor-suppressing function. Phase 1 clinical data of PC14586, presented PMV Pharma, at ASCO demonstrated anti-tumor activity across multiple solid tumor types with a p53 Y220C mutation.

The monoclonal p53 **antibody PAb 1620** binds to a conformational epitope that disappears upon certain mutated p53 or denaturation, which provides an excellent tool for monitoring and identifying pharmacodynamic changes for this unique approach, demonstrating restoration of wildtype p53 protein structure, therefore, restores its tumor suppressor function.

Anti-p53 Unconjugated	PAB122	102101
Anti-p53 WT Unconjugated	PAB1620	102201

References

1. Cook A, Milner J. (1990) Evidence for allosteric variants of wild-type p53, a tumor suppressor protein. Br J Cancer. 61(4):548-52.

2. Peter L Wang, Fiona Sait and Greg Winter (2001) The 'wildtype' conformation of p53: epitope mapping using hybrid proteins. Oncogene 20 (18): 2318-24

3. https://ir.pmvpharma.com/news-releases/news-release

Representative data

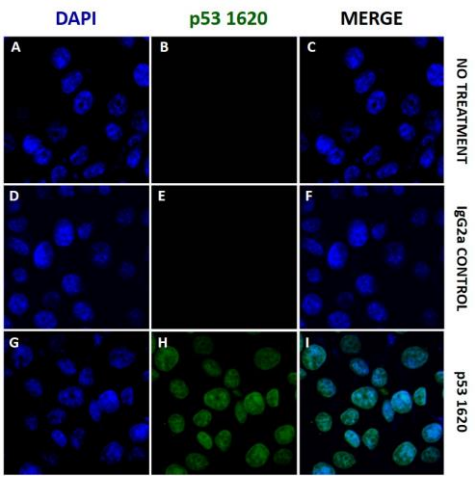

Figure. MCF-7 breast cancer cells were treated with (D – I) or without (A – C) 50 nM dox for 24 hrs, incubated with IgG2a isotype control or anti-p53 PAb-1620 diluted 1:1000. Donkey-anti-mouse iFluor™ 488 (green, B, E, H) was used in a dilution of 1:1000, and DAPI was applied for detection of nuclei (blue, A, D, G).