

Antibody Validation Report



I. Target Information

| | |
|----------------------------------------------------------------|----------------------------|
| Target name | Cellular tumor antigen p53 |
| HGNC ID | HGNC:11998 |
| UniProt accession number (reference multiple if applicable) | P04637 |

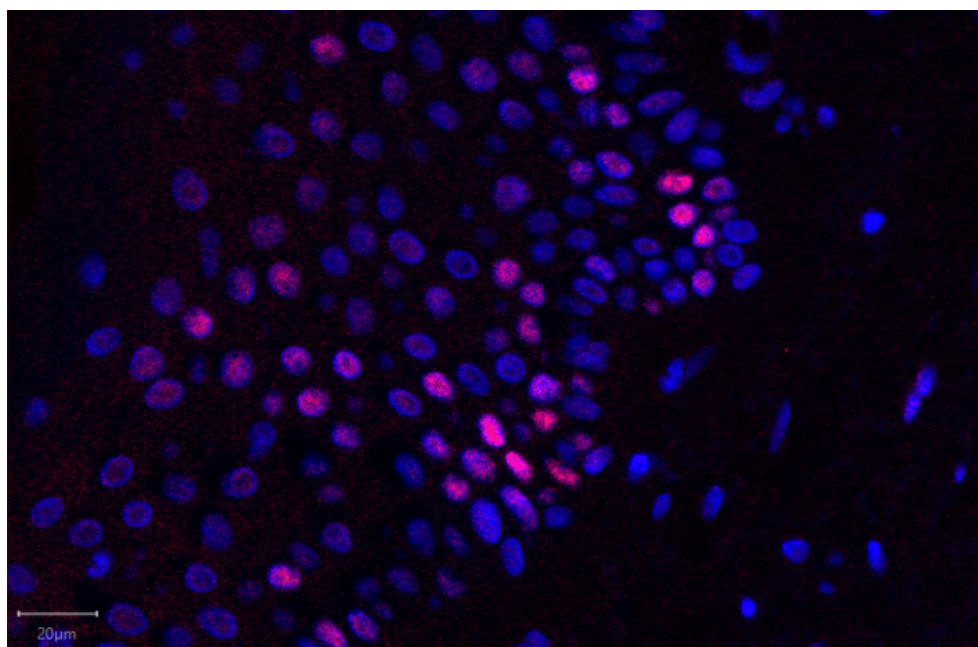
II. Antibody Information

| | |
|-------------------------------------|---------------------|
| RRID | AB_2206626 |
| Host | Mouse |
| Isotype | IgG2b |
| Clonality | DO-7 |
| Vendor | Dako |
| Catalog number | M7001 |
| Recombinant (Y/N) | N |
| Tissue preservation method | FFPE |
| Organ or tissue used for validation | Skin |
| Antibody-based imaging method | Cell DIVE |
| Conjugate | Cy5 |
| Author ORCID | 0000-0001-7524-8260 |
| Vendor Affiliation | |

Additional antibody information (optional)

| | |
|---------------------------|--------------------------------------------------------------------------------------------------------|
| OMAP ID | |
| Lot number | 20082640 |
| Antigen retrieval details | pH 6, pH 9 |
| Manuscript citation DOI | dx.doi.org/10.1101/2022.03.30.486438 |
| Validation protocol DOI | dx.doi.org/10.17504/protocols.io.bpyxmpxn |

III. Exemplary Image from HuBMAP



Caption: Cell DIVE image of p53 (red) and DAPI (blue) in human skin.

IV. Validation Data

a. Vendor Validation

| | |
|-----------------------------|----------------------|
| Data sheet URL | Link |
| Date accessed | 8/29/2022 |
| Vendor suggested use | SDS-PAGE, WB, IHC |

b. Laboratory Validation

Controls used – check those that apply

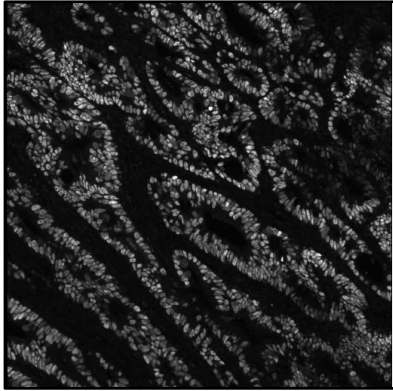
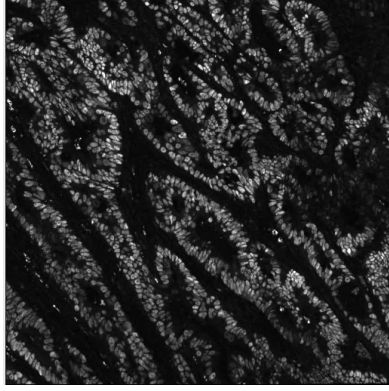
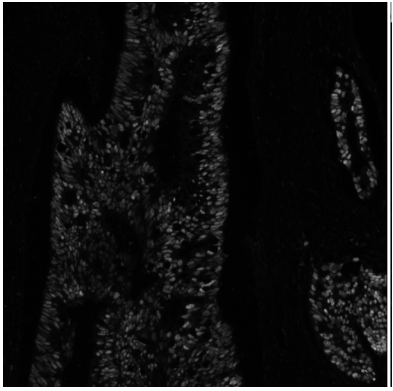
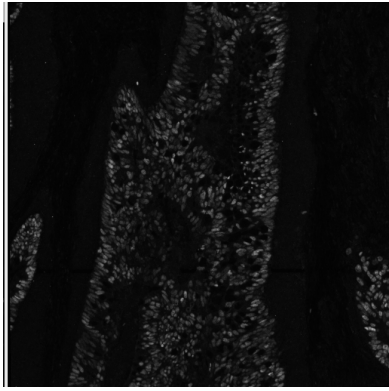
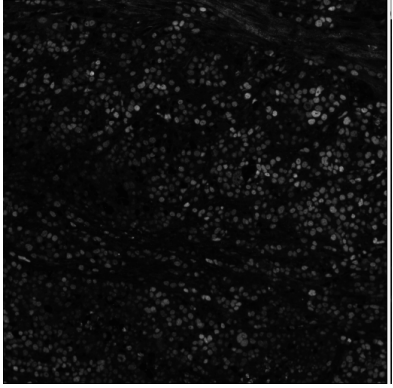
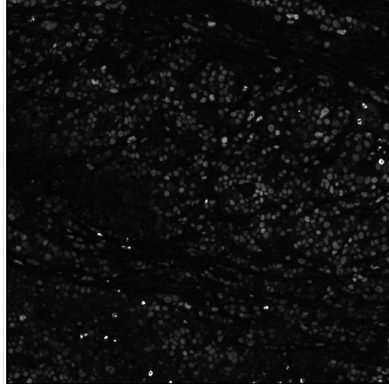
| Positive/negative control tissues | Isotype control | Peptide block | Phosphatase treatment | Cell line controls | Other (please list) |
|---------------------------------------------------------------------------|-----------------|---------------|-----------------------|--------------------|---------------------|
| multi tissue TMA including skin and 12 other organs, normal and cancerous | x | | | | |


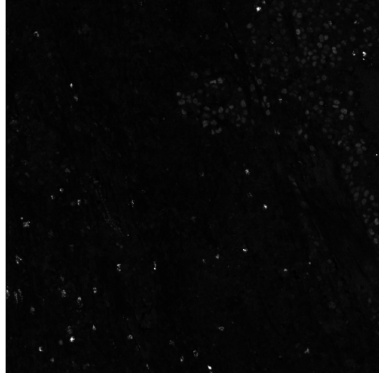
Other antibodies tested?

| Vendor and catalog number | Clonality | Backup clone or not recommended |
|---------------------------------|----------------|----------------------------------|
| Thermo MS-738-PABX | DO-7 + BP53-12 | Not recommended, high background |
| Santa Cruz sc-126 AF647 | DO-1 | Not recommended |
| Cell Signaling Technology 2527S | 7F5 | Backup clone |

Supplemental Data:

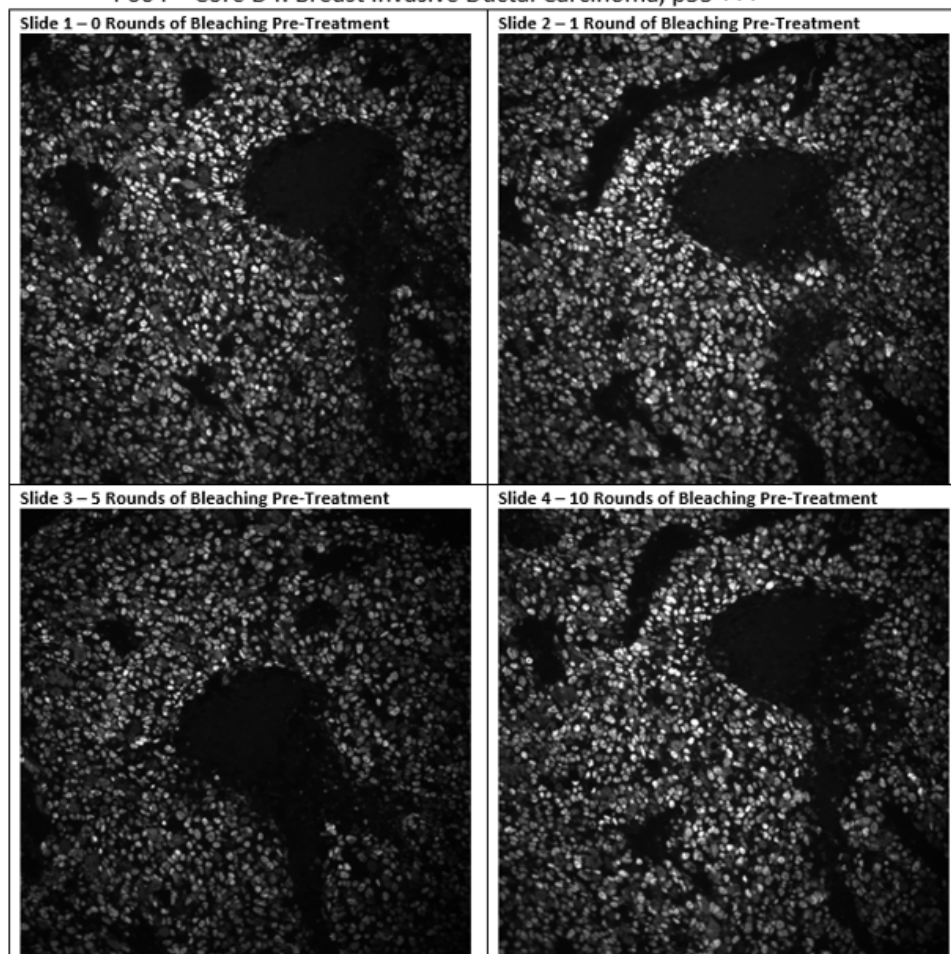
i. Primary characterization

| Description | Predicted p53 expression | p53 (Dako M7001, clone DO-7) at 5 µg/mL, 0-65,000 | Alexa647-p53 (Santa Cruz sc 47698 A647) at 10 µg/mL, 0-22,000 |
|--------------------------------------------------------|--------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Strong p53 expresser, colon adenocarcinoma grade II | 3.3~3.5 |  |  |
| Moderate p53 expresser, colon adenocarcinoma grade II | 2.5~3.0 |  |  |
| Moderate p53 expresser, colon adenocarcinoma grade III | 1.5~2.2 |  |  |

| | | | |
|--------------------------------------------|-------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| Weak/nil p53 expresser; normal colon | 0~0.5 |  |  |
|--------------------------------------------|-------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|

ii. Antigen effects (if applicable)

P004 – Core D4: Breast Invasive Ductal Carcinoma, p53 +++



iii. Direct conjugation (if applicable)

Region 2, old, sun exposed
0-50,000 for P/S, 0-5000 for DC

