Title
Expanding spectrum of ‘spitzoid’ lesions: a small series of 4 cases with MAP2K1 mutations.

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Online Resource 1: Details immunohistochemical stains

Most stains were performed or repeated at the University Medical Center Utrecht (UMCU). For Case 1, 2 and 3 few stains were performed at the center where the case was originally seen.

**Immunohistochemical stains UMCU**

| Stain      | Clone | Firm         | Dilution |
|------------|-------|--------------|----------|
| ALK        | 5A4   | Novocastra   | 1:20     |
| BAP1       | C4    | Santa Cruz   | 1:200    |
| BRAF V600E | VE1   | Ventana      | RTU      |
| HMB-45     | HMB-45| DAKO         | 1:200    |
| Ki-67      | Ki-67 | Ventana      | RTU      |
| MelanA     | A103  | DAKO         | 1:40     |
| NTRK       | EPR17341 | Abcam     | 1:500     |
| p16        | MX007 | Immunologic  | 1:800     |
| p21        | DCS-60.2 | Cellmarque | RTU      |
| ROS1       | D4D6  | Cell Signaling | 1:50   |
| S100       | na    | DAKO         | 1:8000   |

**Additional immunohistochemical stains Symbiant Pathology Expert Center (Case 1)**

| Stain | Clone | Firm   | Dilution |
|-------|-------|--------|----------|
| BAP1  | BSB-109 | BIO-SB | 1:50     |

**Additional immunohistochemical stains Meander Medical Center (Case 2)**

| Stain      | Clone     | Firm         | Dilution |
|------------|-----------|--------------|----------|
| ALK        | NCL-L-ALK | Novocastra   | 1:25     |
| HMB-45     | HMB-45    | DAKO         | RTU      |
| MelanA     | A103      | DAKO         | RTU      |
| Ki-67      | MIB-1     | DAKO         | RTU      |

**Additional immunohistochemical stains Sint Antonius Hospital (Case 3)**

| Stain      | Clone | Firm     | Dilution |
|------------|-------|----------|----------|
| HMB-45     | HMB-45| Ventana  | RTU      |
| MelanA     | A103  | Ventana  | RTU      |
| p16        | E6H4  | Ventana  | RTU      |

na: not applicable; RTU: ready to use