**Supplementary Table 1**. Immunohistochemical findings of this case with reference of positive rate of each marker in peritoneal malignant mesothelioma (PMM) and peritoneal serous carcinoma (PSC).

|  |  |  |  |
| --- | --- | --- | --- |
| Marker (Ref.) | This case | PMM (%) | PSC (%) |
| MOC31 (1) | Positive | 5 | 98 |
| Ber-EP4 (1) | Positive | 9-13 | 83-100 |
| Claudin 4 (1) | Positive, weak | 0 | 98 |
| Calretinin (1) | Positive | 85-100 | 0-38 |
| D2-40 (1) | Positive | 93-96 | 13-65 |
| WT-1 (1) | Positive | 43-93 | 89-93 |
| CEA (1) | Positive | 0 | 0-45 |
| CA19-9 (2) | Positive | 0 | 58 |
| PAX8 (1, 3) | Negative | 0-12  | 93 |
| ER (1) | Positive, weak | 0–8 | 60-93 |
| BAP1 loss (4) | Lost | 67 | 2.5 |

Reference

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4. Andrici, J., J. Jung, A. Sheen, et al. (2016). "Loss of BAP1 expression is very rare in peritoneal and gynecologic serous adenocarcinomas and can be useful in the differential diagnosis with abdominal mesothelioma." Hum Pathol **51**: 9-15.

**Supplementary Table 2.** Primary antibodies used for immunohistochemistry in this study

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Marker | Clone | Source | Dilution | Antigen retrieval |
| PAX8 | PAX8R1 | Abcam, Cambridge, MA, USA | 1:50 | Tris-EDTA (pH 9) |
| HNF4alfa | H1415 | Perseus Proteomics, Tokyo, Japan | 1:100 | Citrate buffer (pH 6) |
| ER | SP1 | VentanaMedical Systems, Tucson, AZ, USA | Prediluted | Tris-EDTA (pH 9) |
| CDX2 | DAK-CDX2 | Dako, Glostrup, Denmark | Prediluted | Tris-EDTA (pH 9) |
| BAP1 | C4 | Santa Cruz Biotechnology, Dallas, TX, USA | 1:100 | Tris-EDTA (pH 9) |
| HER2 | Hercep test | Dako, Glostrup, Denmark | Prediluted | Tris-EDTA (pH 9) |
| Claudin 4 | 3E2C1 | Zymed, South San Francisco, CA, USA | 1:500 | Tris-EDTA (pH 9) |
| PMS2 | EP51 | Dako, Glostrup, Denmark | Prediluted | Tris-EDTA (pH 9) |
| MLH1 | ES05 | Dako, Glostrup, Denmark | Prediluted | Tris-EDTA (pH 9) |
| MSH6 | EP49 | Dako, Glostrup, Denmark | Prediluted | Tris-EDTA (pH 9) |
| WT-1 | 6F-H2 | Dako, Glostrup, Denmark | Prediluted | Tris-EDTA (pH 9) |
| D2-40 | D2-40 | Dako, Glostrup, Denmark | Prediluted | Tris-EDTA (pH 9) |
| P53 | DO7 | Dako, Glostrup, Denmark | Prediluted | Tris-EDTA (pH 9) |
| Pancytokeratin | AE1/AE3 | Dako, Glostrup, Denmark | Prediluted | Tris-EDTA (pH 9) |
| Calretinin  | Polyclonal (rabbit) | Zymed, South San Francisco, CA, USA | 1:20 | Citrate buffer (pH 6) |