

DESCRIPTION	
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects a synthetic peptide specific for human POU2F3 around amino acid 100 in Direct ELISA.
<b>Source</b>	Monoclonal Mouse IgG <sub>2A</sub> Clone # 1091214
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Synthetic Peptide Accession # Q9UKI9
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose.

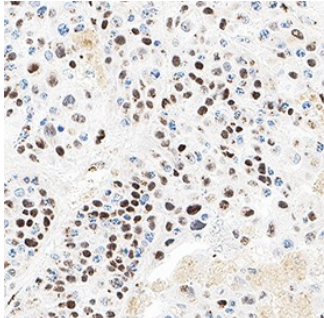
**APPLICATIONS**

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Immunohistochemistry	3-25 µg/mL	Immersion fixed paraffin-embedded sections of human melanoma

**DATA**

**Immunohistochemistry**



**Detection of POU2F3 in Human Melanoma.** POU2F3 was detected in immersion fixed paraffin-embedded sections of human melanoma using Mouse Anti-Human POU2F3 Monoclonal Antibody (Catalog # MAB11625) at 5 µg/ml for 1 hour at room temperature followed by incubation with the Anti-Mouse IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC001). Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using VisUCyte Antigen Retrieval Reagent-Basic (Catalog # VCTS021). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to the nucleus. View our protocol for [IHC Staining with VisUCyte HRP Polymer Detection Reagents](#).

**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Reconstitute lyophilized material at 0.2 mg/ml in sterile PBS. For liquid material, refer to CoA for concentration.
<b>Shipping</b>	Lyophilized product is shipped at ambient temperature. Liquid small pack size (-SP) is shipped with polar packs. Upon receipt, store immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<p><b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b></p> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**BACKGROUND**

POU2F3 is a 47 kDa transcription factor involved in the regulation of the differentiation of keratinocytes. It is also a part of the POU2F3-POU2AF2/POU2AF3 complex that drives the expression of tuft-cell-specific genes. Normal and neoplastic tuft cells share a genetic requirement for POU2F3. POU2F3 is utilized as an ancillary marker for the diagnosis of neuroendocrine-low small cell lung cancer. It is also positive in mesenchymal and neuroectodermal tumors including synovial carcinoma, solitary fibrous tumor, glioblastoma, Wilms tumor and melanoma.

**References:**

1. Hildesheim J, Kühn U, Yee CL, Foster RA, Yancey KB, Vogel JC. The hSkn-1a POU transcription factor enhances epidermal stratification by promoting keratinocyte proliferation. *J Cell Sci.* 2001 May; **114(Pt 10)**:1913-23. doi: 10.1242/jcs.114.10.1913. PMID: 11329378.
2. Wu XS, He XY, Ipsaro JJ, Huang YH, Preall JB, Ng D, Shue YT, Sage J, Egeblad M, Joshua-Tor L, Vakoc CR. OCA-T1 and OCA-T2 are coactivators of POU2F3 in the tuft cell lineage. *Nature.* 2022 Jul; **607(7917)**:169-175. doi: 10.1038/s41586-022-04842-7. Epub 2022 May 16. PMID: 35576971; PMCID: PMC9419707.
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