

DESCRIPTION	
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human AHR in direct ELISAs.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 684217
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human AHR Asn704-Leu848 Accession # P35869
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

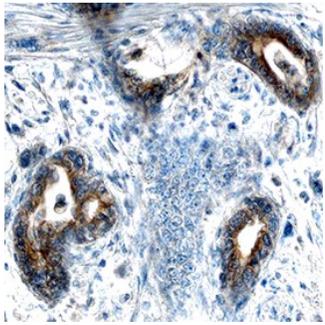
**APPLICATIONS**

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
<b>Immunohistochemistry</b>	8-25 µg/mL	See Below

**DATA**

**Immunohistochemistry**



**AHR in Human Pancreatic Cancer Tissue.**  
AHR was detected in immersion fixed paraffin-embedded sections of human pancreatic cancer tissue using Mouse Anti-Human AHR Monoclonal Antibody (Catalog # MAB6185) at 15 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Specific staining was localized to epithelial cells. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <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**

AHR (Aryl-Hydrocarbon Receptor), also known as bHLHE76, is a 110 kDa member of the bHLH/PAS transcription factor family. It is widely expressed (breast, lung, liver), and serves many functions. First, it binds multiple xenobiotic chemicals in the cytoplasm. This induces dimerization with ARNT, translocation to the nucleus, and activation of P450 genes such as CYP1A1 and UGT1A6. Second, it appears to block cell cycle progression, possibly via a down-regulation of CDK proteins. And third, it blocks apoptosis by interacting with E2F1, thus silencing TP73 and Apaf1 genes. Human AHR is 848 amino acids (aa) in length. It contains a 10 aa prosegment, plus a 838 aa mature molecule that contains a DNA binding motif (aa 13-40), a bHLH region (aa 41-81), and two PAS domains (aa 111-342). Over aa 704-848, human AHR shares 70% aa identity with mouse AHR.