

Aryl hydrocarbon receptor monoclonal antibody (RPT1)

The aryl hydrocarbon receptor (AhR), also known as the dioxin receptor, is a ligand-activated helix/loop/helix transcription factor found in a variety of vertebrate species. The known ligands for AhR are foreign planar aromatic compounds, such as polycyclic aromatic compounds and halogenated aromatic compounds such as 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). Unlike the steroid/thyroid hormone receptors, there is no known physiological ligand for the Ah Receptor.

Studies indicate that in non-ligand activated cells, AhR is found complexed with HSP90 predominantly in the cytoplasm. Upon binding to an agonist, the ligand-activated AhR is believed to transform to a nuclear, DNA binding form. This transformation process appears to involve dissociation of HSP90 from AhR followed by formation of a heterodimer with AhR nuclear translocator protein (Arnt). The AhR-ligand complex appears to initiate gene transcription of cytochrome P450 1A1.

This antibody is covered by our [Worry-Free Guarantee](#).

Citations: 1

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Ordering Information

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ALX-804-4210	100µl
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Manuals, SDS & CofA

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Handling & Storage

Handling Avoid freeze/thaw cycles.

Long Term Storage -20°C

Shipping Blue Ice

Regulatory Status RUO - Research Use Only

Product Details

Alternative Name AhR

Application IF, IHC (PS), IP, WB

Application Notes Detects a band of ~95kDa by Western blot.

Clone RPT1

Formulation Liquid. PBS with 1 mg/mL BSA containing 0.05% sodium azide.

Host Mouse

Immunogen Synthetic peptide corresponding to aa 12-17 (R12KRRKP17) and aa 22-31 (V22KPIPAEGIK31) of mouse AhR (aryl hydrocarbon receptor).

Isotype IgG1

Recommendation Dilutions/Conditions Immunofluorescence (1:100-1:1,000) Immunohistochemistry (paraffin sections, 1:10-1:100) Western Blot (1:1500-1:2,000). Suggested dilutions/conditions may not be available for all applications. Optimal should be determined individually for each application.

Species Reactivity Human, Mouse, Rat

UniProt ID P30561

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