

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](#).

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Ordering Information

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ALX-804-421-R100

100µl

Manuals, SDS & CofA

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Handling	Avoid freeze/thaw cycles.
Long Term Storage	-20°C
Shipping	Blue Ice

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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