

Product datasheet for **AP20330PU-N**

Aryl hydrocarbon Receptor (AHR) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	Western Blot: 1/500-1/1000. Immunofluorescence: 1/50-1/200. Immunohistochemistry on Paraffin Sections: 1/50-1/200.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Specificity:	This antibody detects endogenous levels of AhR protein.
Formulation:	Phosphate buffered saline (PBS), pH~7.2 State: Aff - Purified State: Liquid purified Ig fraction (> 95% pure by SDS-PAGE) Preservative: 0.05% Sodium Azide
Concentration:	1.0 mg/ml
Purification:	Affinity Chromatography using epitope-specific immunogen
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~96 kDa
Gene Name:	aryl hydrocarbon receptor
Database Link:	Entrez Gene 11622 Mouse Entrez Gene 25690 Rat Entrez Gene 196 Human P35869



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Background:

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).

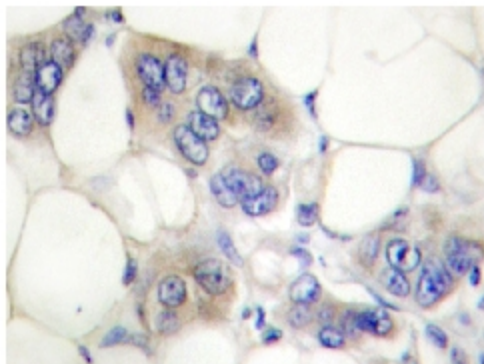
The AHR-ligand complex appears to initiate gene transcription of cytochrome P450 1A1.

Synonyms:

AHR, BHLHE76, Aryl hydrocarbon receptor

Protein Families:

Druggable Genome, Nuclear Hormone Receptor, Transcription Factors

Product images:

Immunohistochemistry analysis of AhR antibody (Cat.-No AP20330PU-N) in paraffin-Embedded human breast carcinoma tissue.