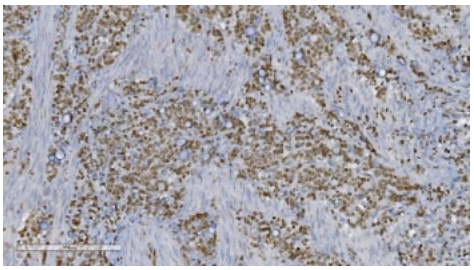
Aryl hydrocarbon Receptor Antibody / AHR (R30876)

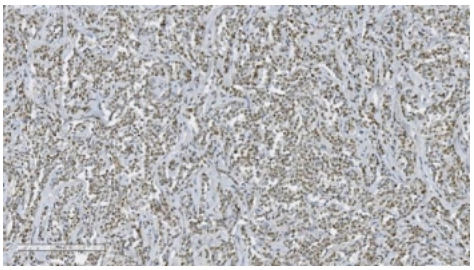
Catalog No.	Formulation	Size
R30876	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

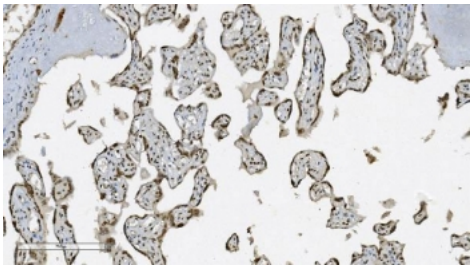
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P35869
Localization	Cytoplasmic, nuclear
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml Immunofluorescence : 5ug/ml Flow Cytometry : 1-3ug/million cells
Limitations	This Aryl hydrocarbon Receptor antibody is available for research use only.



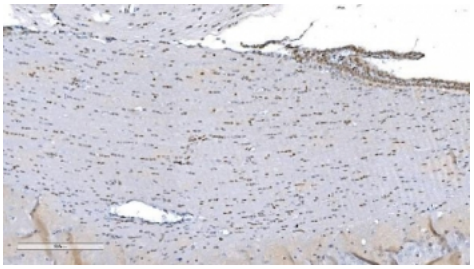
IHC staining of FFPE human gastric cancer tissue with Aryl hydrocarbon Receptor antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



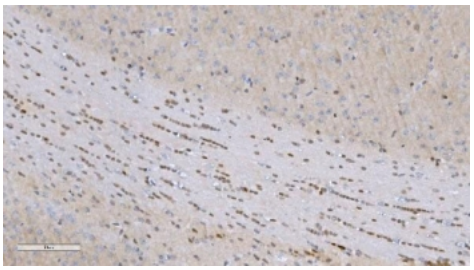
IHC staining of FFPE human lymphadenoma tissue with Aryl hydrocarbon Receptor antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



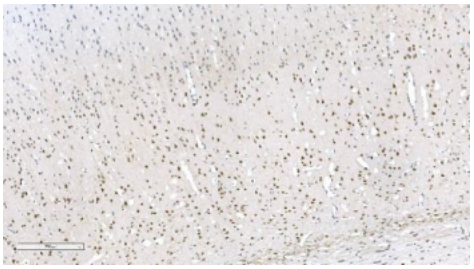
IHC staining of FFPE human placental tissue with Aryl hydrocarbon Receptor antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



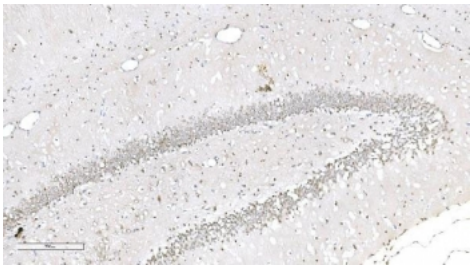
IHC staining of FFPE mouse brain tissue with Aryl hydrocarbon Receptor antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



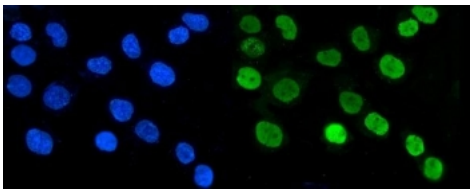
IHC staining of FFPE mouse brain tissue with Aryl hydrocarbon Receptor antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



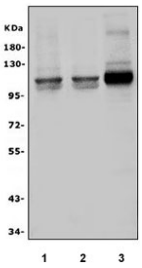
IHC staining of FFPE rat brain tissue with Aryl hydrocarbon Receptor antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



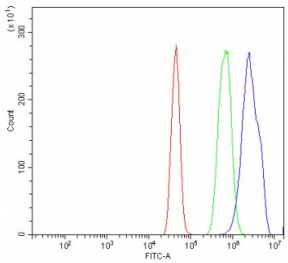
IHC staining of FFPE rat brain tissue with Aryl hydrocarbon Receptor antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Immunofluorescent staining of FFPE human A431 cells with Aryl hydrocarbon Receptor antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



Western blot testing of human 1) HeLa, 2) PC-3 and 3) Caco-2 cell lysate with Aryl hydrocarbon Receptor antibody. Predicted molecular weight ~ 95 kDa.



Flow cytometry testing of human A431 cells with Aryl hydrocarbon Receptor antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= Aryl hydrocarbon Receptor antibody.

Description

Aryl hydrocarbon receptor, also called AHR and bHLHe76, is a member of the family of basic helix-loop-helix transcription factors. It is a cytosolic transcription factor that is normally inactive, bound to several co-chaperones. The gene is mapped on 7p21.1. Estrogenic actions of AHR agonists were detected in wildtype ovariectomized mouse uteri, but were absent in Ahr-/- or Er-alpha -/- ovariectomized mice. CD4-positive cells from mice lacking the recepter developed Th17 responses but failed to produce IL-22 and did not show enhanced Th17 development. Activation of Aryl hydrocarbon receptor during induction of EAE accelerated disease onset and increased pathology in wildtype mice, but not in -/- mice. The TDO-AHR pathway is active in human brain tumors and is associated with malignant progression and poor survival. Activity within ROR-gamma-t-positive ILC could be induced by dietary ligands such as those contained in vegetables of the family Brassicaceae.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the Aryl hydrocarbon Receptor antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

Amino acids 832-848 (HPSEARPFPDLTSSGFL-human) were used as the immunogen for this Aryl hydrocarbon Receptor antibody.

Storage

After reconstitution, the Aryl hydrocarbon Receptor antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.