

Rabbit anti-Human NeuroD1 Polyclonal Antibody | anti-NEUROD1 antibody

NeuroD1 Antibody (N-term)

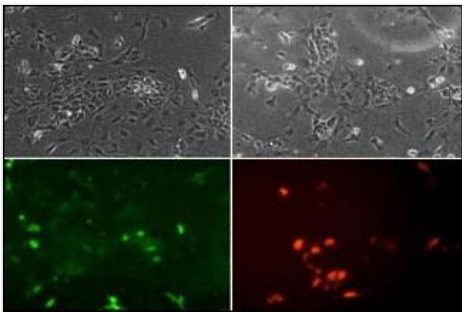
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA287428	Rabbit	Human	Immunohistochemistry, Immunofluorescence, ELISA, Western Blot

PRODUCT SYNONYMS

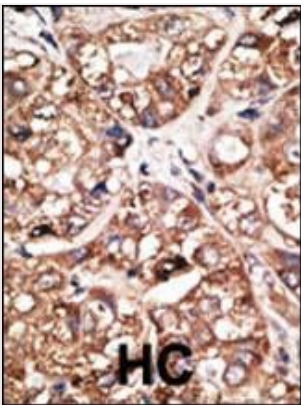
NeuroD1; Polyclonal Antibody; NeuroD1 Antibody (N-term); Neurogenic differentiation factor 1; NeuroD; Class A basic helix-loop-helix protein 3; bHLHa3; NEUROD1; BHLHA3; NEUROD; anti-NEUROD1 antibody

PRODUCT SPECIFICATIONS

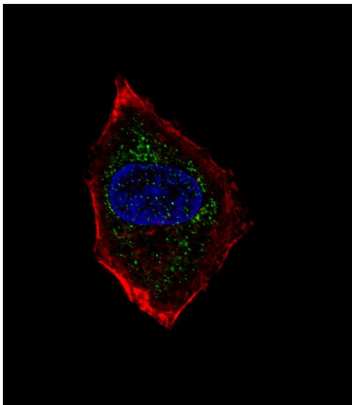
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit Ig
Specificity	This NeuroD1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 15-45 amino acids from the N-terminal region of human NeuroD1.
Purity/Purification	Purified Rabbit Polyclonal Antibody (Pab)
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Concentration	Vial Concentration: 2 (varies by lot)
Sequence Positions	15-45
Sequence Length	356
Applicable Applications for anti-NEUROD1 antibody	IHC (Immunohistochemistry), IF (Immunofluorescence), ELISA, WB (Western Blot)
Antigen Type	Synthetic Peptide
Antigen Source	HUMAN
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 6 months. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.



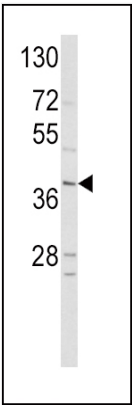
IF (Immunofluorescence)
ES cells were transiently transfected with DYKDDDDK-tagged mouse NeuroD1 (tagged on N-term).Fixed 24h post transfection.Stained for DYKDDDDK tag (red) to check that some cells express protein. Most protein was in nucleus but some was cytoplasmic. Stained with NeuroD1 N-term antibodies at 1:100. NeuroD1 N-term antibody showed strong and clear staining with similar pattern to the DYKDDDDK staining.(Supplied by Sally Lowell,Edinburgh University



IHC (Immunohistochemistry)
Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.



IF (Immunofluorescence)
Fluorescent confocal image of HepG2 cell stained with hNeuroD1-Q30. HepG2 cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then incubated with hNeuroD1-Q30 primary antibody (1:25, 1 h at 37 degree). For secondary antibody, Alexa Fluor 488 conjugated donkey anti-rabbit antibody (green) was used (1:400, 50 min at 37 degree).Cytoplasmic actin was counterstained with Alexa Fluor 555 (red) conjugated Phalloidin (7units/ml, 1 h at 37 degree). Nuclei were counterstained with DAPI (blue) (10 ug/ml, 10 min).hNeuroD1-Q30 immunoreactivity is localized to vesicles significantly.



WB (Western Blot)
Western blot analysis of hNeuroD1-Q30 in HepG2 cell line lysates (35ug/lane). NEUROD1 (arrow) was detected using the purified Pab.

ADDITIONAL INFORMATION

Related Product Information for anti-NEUROD1 antibody	NeuroD1 acts as a differentiation factor during neurogenesis. They are expressed transiently in a subset of neurons in the central and peripheral nervous systems at the time of their terminal differentiation. NeuroD1 is a basic helix-loop-helix (bHLH) protein contain 1 bHLH domain. NeuroD1 is a transcriptional activator, for efficient DNA binding it requires dimerization with another bHLH protein. It was reported that NeuroD1 involves heterodimerization with the ubiquitous bHLH protein E47, and regulates insulin gene expression by binding to a critical E-box motif on the insulin promoter. Defects in NEUROD1 causes maturity onset diabetes of the young type VI. MODY6 is a form of non-insulin-dependent diabetes mellitus (NIDDM) characterized by an autosomal dominant mode of inheritance, onset during young adulthood and a primary defect in insulin secretion.
Product Categories/Family for anti-NEUROD1 antibody	Cardiovascular; Metabolism; Neuroscience
References	Breslin, M.B., et al., J. Biol. Chem. 278(40):38991-38997 (2003). Malecki, M.T., et al., Acta Diabetol 40(2):109-111 (2003). Cinek, O., et al., Diabetes Res. Clin. Pract. 60(1):49-56 (2003). Ye, L., et al., Zhonghua Yi Xue Yi Chuan Xue Za Zhi 19(6):484-487 (2002). Kanatsuka, A., et al., Metab. Clin. Exp. 51(9):1161-1165 (2002).

NCBI AND UNIPROT INFORMATION

NCBI GI #	121114306
NCBI GeneID	4760
NCBI Accession #	NP_002491.2
NCBI GenBank Nucleotide #	NM_002500.4
UniProt Accession #	Q13562; O00343; Q13340; Q5U095; Q96TH0; Q99455; Q9UEC8; B2R9I8; F1T0E1
Molecular Weight	39920
NCBI Official Full Name	neurogenic differentiation factor 1
NCBI Official Synonym Full Names	neuronal differentiation 1
NCBI Official Symbol	NEUROD1
NCBI Official Synonym Symbols	BETA2; BHF-1; MODY6; NEUROD; bHLHa3
NCBI Protein Information	neurogenic differentiation factor 1
UniProt Protein Name	Neurogenic differentiation factor 1
UniProt Gene Name	NEUROD1
UniProt Synonym Gene Names	BHLHA3; NEUROD; NeuroD; NeuroD1; bHLHa3
UniProt Entry Name	NDF1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/polyclonal/neurod1-antibody-immunohistochemistry-immunofluorescence-western-blot-elisa/287428>