ARG44425
anti-NEUROD2 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes NEUROD2
Tested Reactivity	Hu, Ms, Rat
Tested Application	FACS, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	NEUROD2
Species	Human
Immunogen	Human NEUROD2 recombinant protein (aa. sequence: M1-V227).
Conjugation	Un-conjugated
Alternate Names	NEUROD2; Neuronal Differentiation 2; BHLHa1; NDRF; NeuroD-Related Factor; Class A Basic Helix-Loop-Helix Protein 1; Neurogenic Differentiation Factor 2; Neurogenic Differentiation 2; Neurogenic Basic-Helix-Loop-Helix Protein; NeuroD2; EIEE72; BHLHA1; DEE72

Application Instructions

Application table

Application	Dilution
FACS	1-3 µg/1x10^6 cells
WB	0.25-0.5 µg/ml

Application Note: The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

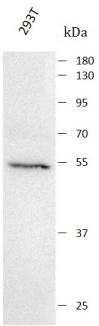
Properties

Form	Liquid
Purification	Affinity purified with Immunogen.
Buffer	0.9% NaCl, 0.2% Na2HPO4, 0.05% Sodium azide and 4% Trehalose.
Preservative	0.05% Sodium azide
Stabilizer	4% Trehalose
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

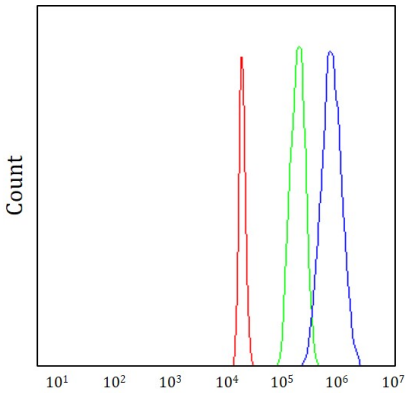
Gene Symbol	NEUROD2
Gene Full Name	Neuronal Differentiation 2
Background	This gene encodes a member of the neuroD family of neurogenic basic helix-loop-helix (bHLH) proteins. Expression of this gene can induce transcription from neuron-specific promoters, such as the GAP-43 promoter, which contain a specific DNA sequence known as an E-box. The product of the human gene can induce neurogenic differentiation in non-neuronal cells in Xenopus embryos, and is thought to play a role in the determination and maintenance of neuronal cell fates.
Function	Transcriptional regulator implicated in neuronal determination. Mediates calcium-dependent transcription activation by binding to E box-containing promoter. Critical factor essential for the repression of the genetic program for neuronal differentiation; prevents the formation of synaptic vesicle clustering at active zone to the presynaptic membrane in postmitotic neurons. Induces transcription of ZEB1, which in turn represses neuronal differentiation by down-regulating REST expression. Plays a role in the establishment and maturation of thalamocortical connections; involved in the segregation of thalamic afferents into distinct barrel domains within layer VI of the somatosensory cortex. Involved in the development of the cerebellar and hippocampal granular neurons, neurons in the basolateral nucleus of amygdala and the hypothalamic-pituitary axis. Associates with chromatin to the DPYSL3 E box-containing promoter.
Calculated Mw	41 kDa
Cellular Localization	Nucleus

Images



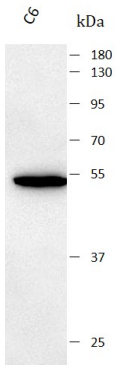
ARG44425 anti-NEUROD2 antibody WB image

Western blot: 293T stained with ARG44425 anti-NEUROD2 antibody at 2 µg/mL dilution.



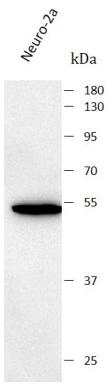
ARG44425 anti-NEUROD2 antibody FACS image

Flow Cytometry: 293T stained with ARG44425 anti-NEUROD2 antibody at 1 µg/10^6 cells dilution.



ARG44425 anti-NEUROD2 antibody WB image

Western blot: C6 stained with ARG44425 anti-NEUROD2 antibody at 2 µg/mL dilution.



ARG44425 anti-NEUROD2 antibody WB image

Western blot: Neuro-2a stained with ARG44425 anti-NEUROD2 antibody at 2 µg/mL dilution.