ARG53798
anti-CD230 / Prion protein antibody [EM-20]

Package: 100 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [EM-20] recognizes CD230 / Prion protein
Tested Reactivity	Hu
Tested Application	WB
Specificity	The clone EM-20 recognizes human prion protein (PrP). Diglycosylated form of PrP has ~ 40 kDa, monoglycosylated form ~ 30 kDa, and nonglycosylated form ~ 19-21 kDa. This antibody is suitable for discrimination between normal cellular prion protein (PrPc) and its conformationally changed form (PrPSc) prion protein.
Host	Mouse
Clonality	Monoclonal
Clone	EM-20
Isotype	IgG2a
Target Name	CD230 / Prion protein
Species	Human
Immunogen	Recombinant human prion protein
Conjugation	Un-conjugated
Alternate Names	GSS; PrPc; PrP33-35C; PrP27-30; Alternative prion protein; p27-30; CJD; ASCR; CD230; PrP; PRIP; KURU; AltPrP

Application Instructions

Application table

Application	Dilution
WB	0.5 µg/ml

Application Note: WB: Non-reducing condition are essential.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

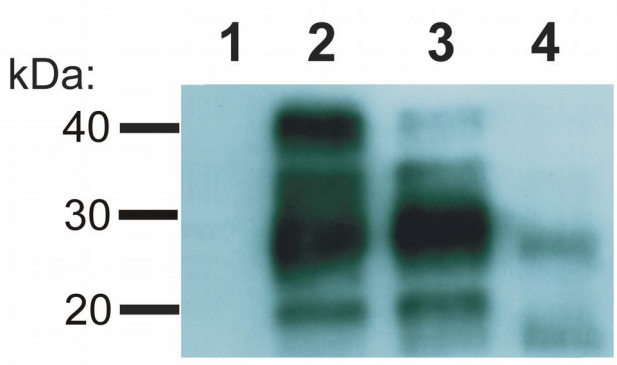
Form	Liquid
Purification	Purified from ascites by protein-A affinity chromatography.
Purity	> 95% (by SDS-PAGE)
Buffer	PBS (pH 7.4) and 15 mM Sodium azide
Preservative	15 mM Sodium azide
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. 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

Database links	GeneID: 5621 Human Swiss-port # F7VJQ1 Human
Gene Symbol	PRNP
Gene Full Name	prion protein
Background	CD230 / Human prion protein (PrP), also known as PRNP, is a ubiquitously expressed GPI-anchored cell surface glycoprotein associating with lipid raft components and functioning as a signaling molecule. CD230 / PrP plays a role in apoptosis in a cell context-dependent manner, is involved in proliferation of epithelial cells and in distribution of junction-associated proteins in human enterocytes. Conversion of this normal cellular prion protein (PrPc) into an abnormal conformer (PrPSc) is the crucial step associated with triggering the pathogenesis of the prion neurodegenerative disorders, such as the Creutzfeld-Jakob disease (CJD). Whereas PrPc is rich in alpha-helices, the PrPSc form has higher content of beta-sheets and is resistant to proteinase K.
Research Area	Developmental Biology antibody; Neuroscience antibody
Calculated Mw	9 kDa
PTM	The glycosylation pattern (the amount of mono-, di- and non-glycosylated forms or glycoforms) seems to differ in normal and CJD prion. Isoform 2 is sumoylated with SUMO1.

Images



ARG53798 anti-CD230 / Prion protein antibody [EM-20] WB image

Western blot: 1,2. Creutzfeld-Jakob disease (CJD) negative Human brain tissue lysate 3,4. CJD positive Human brain tissue lysate stained with ARG53798 anti-CD230 / Prion protein antibody [EM-20].

CJD positive patient has proteinase K resistent prion protein. Lane 1,4: Samples with proteinase K treatment. Lane 2,3: Samples without proteinase K treatment.