Datasheet for ABIN2855994

anti-HLA-DRB1 antibody

3 Images | 1 Publication

Go to Product page

Overview

Quantity:	100 µL
Target:	HLA-DRB1
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This HLA-DRB1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF), Immunohistochemistry (IHC), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunocytochemistry (ICC)

Product Details

Immunogen:	Recombinant protein encompassing a sequence within the center region of human HLA-DRB1. The exact sequence is proprietary.
Isotype:	IgG
Cross-Reactivity:	Human
Characteristics:	Rabbit Polyclonal antibody to HLA-DRB1 (major histocompatibility complex, class II, DR beta 1) HLA-DRB1 antibody [N1C3]
Purification:	Purified by antigen-affinity chromatography.

Target Details

Target:	HLA-DRB1
Alternative Name:	major histocompatibility complex, class II, DR beta 1 (HLA-DRB1 Products)

Target Details

Background:	HLA-DRB1 belongs to the HLA class II beta chain paralogs. The class II molecule is a heterodimer consisting of an alpha (DRA) and a beta chain (DRB), both anchored in the membrane. It plays a central role in the immune system by presenting peptides derived from extracellular proteins. Class II molecules are expressed in antigen presenting cells (APC: B lymphocytes, dendritic cells, macrophages). The beta chain is approximately 26-28 kDa. It is encoded by 6 exons. Exon one encodes the leader peptide, exons 2 and 3 encode the two extracellular domains, exon 4 encodes the transmembrane domain, and exon 5 encodes the cytoplasmic tail. Within the DR molecule the beta chain contains all the polymorphisms specifying the peptide binding specificities. Hundreds of DRB1 alleles have been described and typing for these polymorphisms is routinely done for bone marrow and kidney transplantation. DRB1 is expressed at a level five times higher than its paralogs DRB3, DRB4 and DRB5. DRB1 is present in all individuals. Allelic variants of DRB1 are linked with either none or one of the genes DRB3, DRB4 and DRB5. There are 4 related pseudogenes: DRB2, DRB6, DRB7, DRB8 and DRB9.
Gene ID:	3123
UniProt:	P01911, P01912, Q29974
Pathways:	TCR Signaling, Positive Regulation of Peptide Hormone Secretion, Production of Molecular Mediator of Immune Response, CXCR4-mediated Signaling Events, Cancer Immune Checkpoints, Human Leukocyte Antigen (HLA) in Adaptive Immune Response

Application Details

Application Notes:	WB: 1:500-1:3000. IHC-P: 1:100-1:1000. Optimal dilutions/concentrations should be determined by the researcher. Not tested in other applications.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	0.68 mg/mL
Buffer:	1XPBS (pH 7), 20 % Glycerol, 0.025 % ProClin 300
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

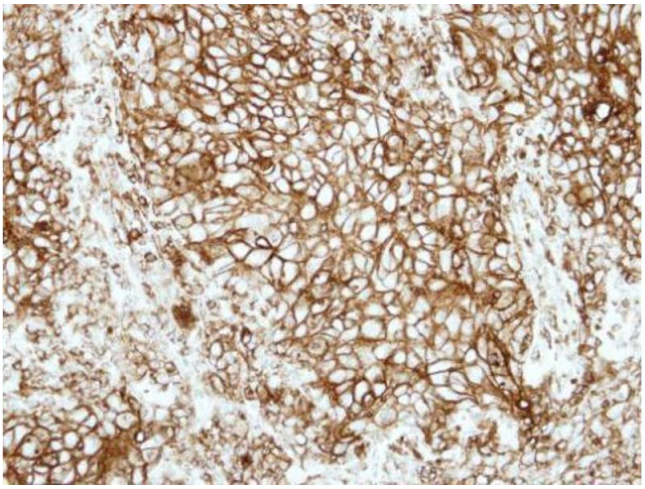
Handling

Storage:	4 °C,-20 °C
Storage Comment:	Store as concentrated solution. Centrifuge briefly prior to opening vial. For short-term storage (1-2 weeks), store at 4°C. For long-term storage, aliquot and store at -20°C or below. Avoid multiple freeze-thaw cycles.

Publications

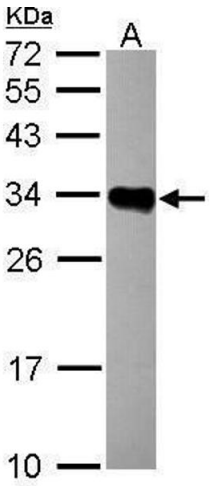
Product cited in:	Andrés-Benito, Moreno, Aso, Povedano, Ferrer: "Amyotrophic lateral sclerosis, gene deregulation in the anterior horn of the spinal cord and frontal cortex area 8: implications in frontotemporal lobar degeneration." in: **Aging**, Vol. 9, Issue 3, pp. 823-851, (2017) (PubMed).

Images



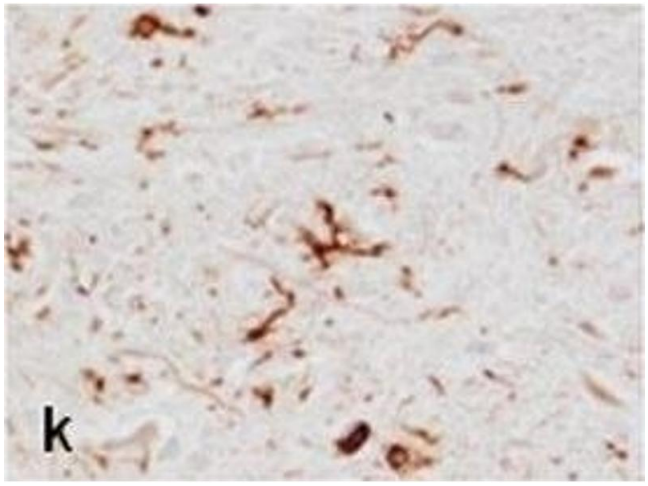
Immunohistochemistry

Image 1. IHC-P Image Immunohistochemical analysis of paraffin-embedded human lung adenocarcinoma, using HLA-DRB1, antibody at 1:500 dilution.



Western Blotting

Image 2. WB Image Sample (30 ug of whole cell lysate) A: Raji 12% SDS PAGE antibody diluted at 1:1000



Immunohistochemistry

Image 3. Anterior horn of the spinal cord. Haematoxilin and eosin staining showing damaged neurons in ALS (a). Immuno-histochemistry to TDP-43 showing skein-like intracytoplasmic inclusions (b), VDAC (c, d), GFAP (e, f), IBA-1 (g, h), CD68 (i, j), HLA-DRB1 (k, l), HLA-DRB5 (m, n), IL-10 (o, p), TNF-α (q, r) and GluT (SLC1A2) (s, t) in the anterior horn of the lumbar spinal cord in control (c, e, g, l, k, m, o, q, s) and sALS (a, b, d, f, h, j, l, n, p, r, t) cases. TDP-43-immunoreactive cytoplasmic inclusions are seen in motor neurons in sALS. GFAP is increased in reactive astrocytes, microglial cells have a round, amoeboid morphology as seen with IBA-1, CD-68, HLA-DRB1, and HLA-DRB5 antibodies. VDAC immunoreactivity is decreased whereas IL-10 and TNF-α is increased in remaining motor neurons in sALS. SLC1A2 immunoreactivity is reduced in the membrane of neurons and in neuropil of the anterior horn in sALS. Paraffin sections, slightly counterstained with haematoxylin, a, c-d, o-t, bar in t = 40µm, e-n, bar in = 20µm, bar in b = 10µm - figure provided by CiteAb. Source: PMID28283675