

HLA-DP/DQ/DR mAb (IVA12), InVivoPure+

Endotoxin level ≤ 1 EU/mg

Description:

The HLA-DP/DQ/DR monoclonal antibody (clone IVA12) was purified from supernatant of HB-145™ IVA12 from the ATCC.*

The clone IVA12 recognizes the shared epitopes of human leukocyte antigen (HLA) class II molecules HLA-DP, HLA-DQ and HLA-DR heterodimeric cell surface glycoproteins comprised of an α (heavy) chain and a β (light) chain. They are expressed on B cells, activated T cells, monocytes/macrophages, dendritic cells, and other non-professional antigen presenting cells (APCs) [1][3]. HLA-Class II expressing APCs specifically present antigens recognized by TCR/CD3 complex of CD4+ T cells [2][3]. Reactive microglia and perivascular cells in multiple sclerosis lesions express all three types of HLA-Class II molecules, whereas microglia in the normal CNS express HLA-DR only [1].

This antibody is produced exclusively under serum-free conditions from hybridoma and purified with Protein-A or Protein-G affinity chromatography.

Product-ID:	AK3601P+
Clone:	IVA12
Immunogen:	Animals were immunized with the Priess human B cell line
Host:	Mouse
Clonality:	Monoclonal
Isotype:	IgG1 κ
Formulation:	Clear Liquid, PBS, pH 7.4, 0.2 μ m sterile filtered
Concentration:	≥ 1.00 mg/mL
Purity:	≥ 95 % (CGE, reducing conditions) ≤ 5 % aggregates (analytical SEC)
Endotoxin:	≤ 1 EU/mg (LAL test)
Storage:	2 - 8 °C
Recommended Isotype Control:	Mouse IgG1 κ Isotype Control (AK3421P+)

The product is for research use only and not for use in diagnostic or therapeutic procedures.

***The ATCC trademark and trade name and any and all ATCC catalog numbers are trademarks of the American Type Culture Collection.**

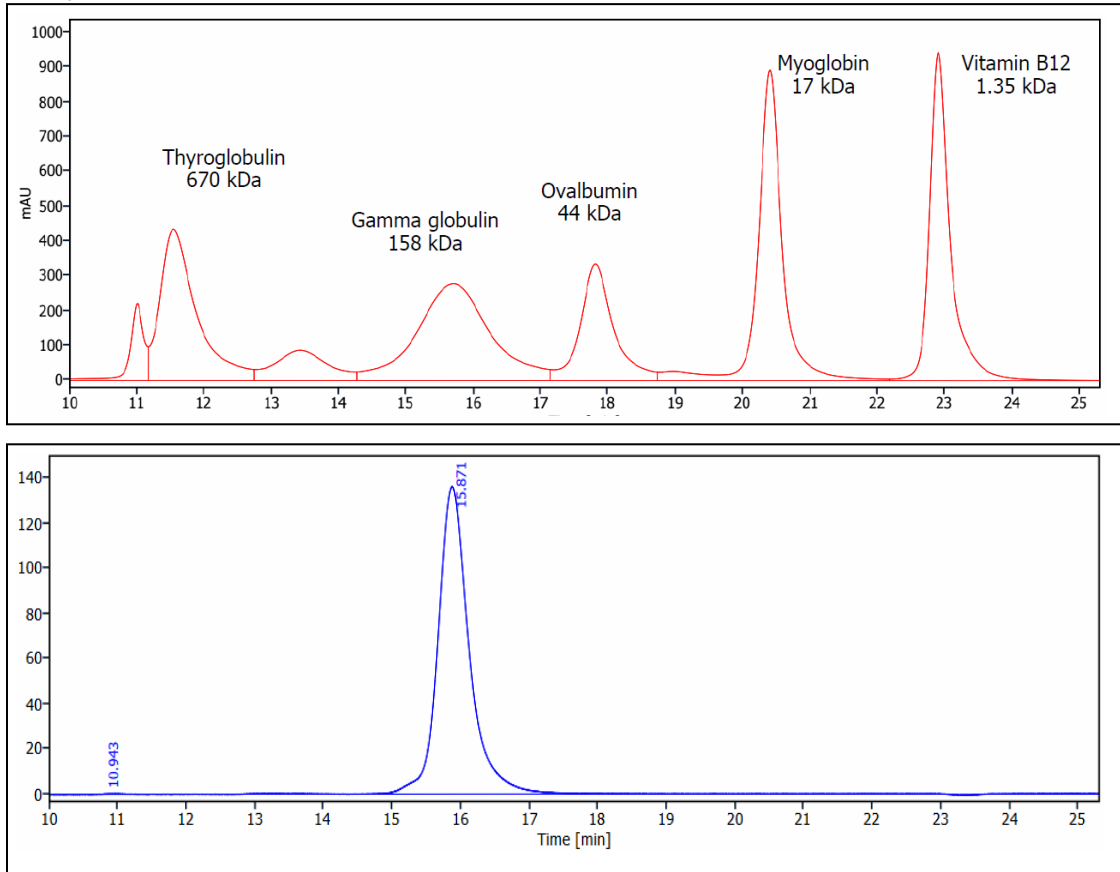
InVivo BioTech Services GmbH is certified to [ISO 9001](#) and [ISO 13485](#).

Literature:

- [1] Ulvestad E, Williams K, Bø L, Trapp B, Antel J, Mørk S. HLA class II molecules (HLA-DR, -DP, -DQ) on cells in the human CNS studied in situ and in vitro. *Immunology*. 1994 Aug;82(4):535-41. PMID: 7835916; PMCID: PMC1414924.
- [2] Zamoyska R. CD4 and CD8: modulators of T-cell receptor recognition of antigen and of immune responses? *Curr Opin Immunol*. 1998 Feb;10(1):82-7. doi: 10.1016/s0952-7915(98)80036-8. PMID: 9523116.
- [3] Wang M, Tang ST, Stryhn A, Justesen S, Larsen MV, Dziegiel MH, Lewinsohn DM, Buus S, Lund O, Claesson MH. Identification of MHC class II restricted T-cell-mediated reactivity against MHC class I binding Mycobacterium tuberculosis peptides. *Immunology*. 2011 Apr;132(4):482-91. doi: 10.1111/j.1365-2567.2010.03383.x. Epub 2011 Feb 7. PMID: 21294723; PMCID: PMC3075502.

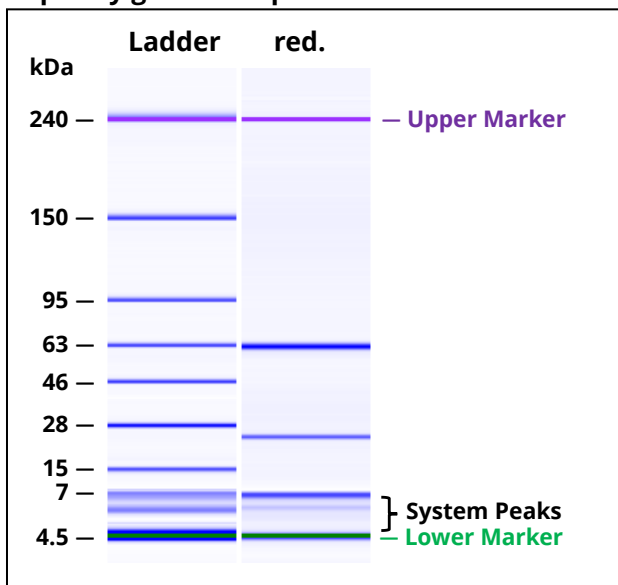
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 — Supplementary Data**

Analytical SEC:



Analytical SEC of purified protein (blue) in comparison with gel filtration standard (red).

Capillary gel electrophoresis:



CGE of the purified protein under reducing (red.) conditions.