

DATASHEET

Recombinant Human CD74 Protein

CAT. NO. AXP6639

KEY FEATURES

Product Type	Recombinant Protein	Target	CD74
Expression Host	HEK293	Theoretical MW	26.5 kDa
Purification Tag	6xHis at C-terminus	Storage	-20°C

BACKGROUND

CD74 molecule (CD74), also known as the invariant chain, is a non-polymorphic transmembrane glycoprotein that plays a central role in the immune system by acting as a molecular chaperone for major histocompatibility complex class II (MHC II) molecules. It stabilizes peptide-free MHC II alpha/beta heterodimers after their synthesis, promotes their exit from the endoplasmic reticulum, and directs them to endocytic compartments for antigen processing and presentation. Beyond its chaperone function, CD74 serves as a high-affinity cell surface receptor for macrophage migration inhibitory factor (MIF) and d-dopachrome tautomerase (D-DT/MIF2), as well as a functional receptor for tissue inhibitor of metalloproteinases-1 (TIMP-1), and regulates the transport of the angiotensin II type I receptor. Through interactions with these ligands and signaling partners such as CD44, CD74 activates multiple intracellular pathways including PI3K/Akt, AMPK, NF-κB, and ERK that influence B cell maturation, cell proliferation, and energy metabolism.

OVERVIEW

Product Name	Recombinant Human CD74 Protein
Target	CD74
Expression Host	HEK293
Theoretical Molecular Mass	26.5 kDa
Purification Tag	6xHis at C-terminus
Usage	Validated for use as an immunogen and as a reagent in immunological assays
Formulation	Liquid, Phosphate buffered saline
UniProt Accession	P04233 (Human)
Organism	Homo sapiens (Human)

DATASHEET

Recombinant Human CD74 Protein

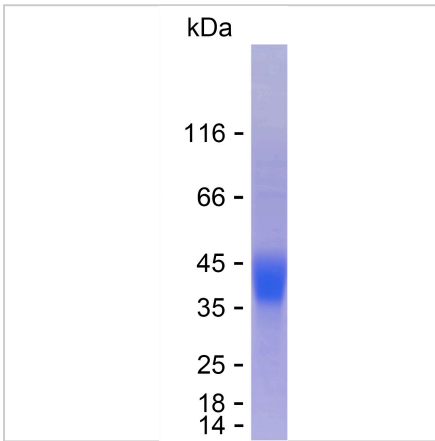
CAT. NO. AXP6639

CORE SEQUENCE

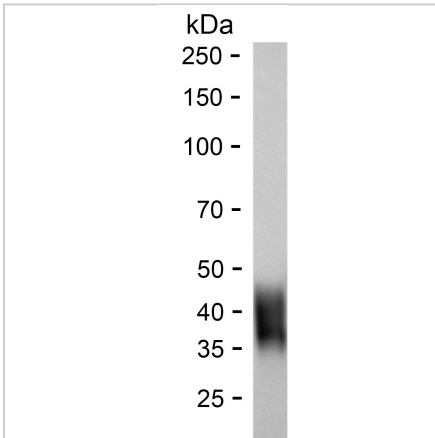
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HHWLLFEMSRHSLEQKPTDAPPKVLTKCQEEVSHIPAVHPGSRPKCDENGNLPLQCYGSIGYCWCVFPNGTEVPNTRSRGHHNCSESLELEDPSGLGVTKQD

Note: The core sequence of the recombinant protein is shown above. The N and C termini have shortened by 0-10 amino acids. The exact sequence is proprietary information.

DATA



The purified protein was run on 15% SDS-PAGE at reducing conditions. The gel was then stained with Coomassie brilliant blue and destained. Western Blotting using HRP conjugated 6xHis antibody. Note: The molecular weight of the protein as observed on SDS-PAGE under reducing conditions may differ from its predicted value, due to glycosylation.



Western Blotting using HRP conjugated 6xHis antibody.

STORAGE

Shipped on dry ice. Upon receipt, store 2 days at 2 to 8°C, or 12 months when aliquoted and stored at -20°C or below. Avoid repeated freeze-thaw cycles.

RESEARCH USE ONLY

For Research Use Only. Not for use in diagnostic procedures.