

CD43 (DF-T1)

Format	Catalog No.	Pack size	Dilution
Concentrated	G6693 A, B, C	0.1, 0.5, 1.0 mL	1:100 - 200
Prediluted	G6693 AA, BB	6.0, 3.0 mL	Ready to use

ANTIBODY SPECIFICATIONS

- **HOST SPECIES:** Mouse
- **CLONE:** DF-T1
- **ISOTYPE:** IgG1
- **CELLULAR LOCALIZATION:** Cell Membrane
- **IMMUNOGEN:** CD43 (leukosialin, sialophorin, or leukocyte sialoglycoprotein)
- **MOLECULAR WEIGHT:** ~54 kDa
- **SPECIES REACTIVITY:** Human
- **POSITIVE CONTROLS:** Tonsil, Lymph node

INTENDED USE

This antibody is intended **for research use only (RUO)** and is not approved for diagnostic or therapeutic applications. It is optimized for the detection of CD43 protein in formalin-fixed, paraffin-embedded (FFPE) human tissues by immunohistochemistry (IHC).

SUMMARY AND APPLICATION

All thymocytes and T-cells exhibit the cell surface glycoprotein known as CD43 (leukosialin, sialophorin, or leukocyte sialoglycoprotein). T cells, B cells, NK cells, and monocytes are all activated by CD43.

SCIENTIFIC BACKGROUND

Most haematopoietic cells produce CD43 (leukosialin, sialophorin), a transmembrane mucin-like protein with a high negative charge. Although it sometimes encourages leukocyte aggregation, CD43 helps create a repellent barrier that prevents cellular attachment. Through its association with the actin-binding proteins ezrin and moesin, CD43 controls cell-cell contacts during lymphocyte trafficking and plays a regulatory function in T-cell morphological remodelling. In addition to increasing LFA-1 adhesiveness, CD43 signalling inhibits LFA-1 induction through other receptors. When CD43 is expressed, the functionally active tumour suppressor p53 protein is induced; however, when p53 and ARF are deficient, CD43 encourages tumour growth and viability. It seems that CD43 plays a significant role in regulating leukocyte activities. Adenoid basal cell carcinoma and Wiscott-Aldrich syndrome are among the illnesses linked to CD43 malfunction.

RECOMMENDED USAGE

- **IHC Protocol Highlights:**
 - Dilution: 1–2 µg/mL
 - Incubation: 30 minutes at room temperature

- o Antigen Retrieval: Heat in 10 mM Tris with 1 mM EDTA (pH 9.0) at 95°C for 45 minutes, followed by cooling
- **Specimen Type:** FFPE sections, preferably ~4 µm

FORMULATION & STORAGE:

- Buffer: 10 mM PBS, 0.05% BSA, 0.05% sodium azide
- Storage:
 - o Dilution: 1–2 µg/ML
 - o Without azide: –20 to –80°C
- Shelf Life: 24 months under proper conditions
- Hazard Classification: Non-hazardous; no MSDS required

LIMITATIONS

- Interpretation must be made by a qualified pathologist
- Tissue fixation and handling may affect staining quality
- Negative results do not always indicate absence of antigen—consider panel testing

PRECAUTIONS

- Contains 0.05% sodium azide – avoid ingestion and contact with skin or mucosa
- Wear gloves and avoid contact with eyes or mucosa
- Do not use reagents past expiration or if packaging appears compromised
- Do not pipette by mouth or reuse slides/containers without proper sterilization

TECHNICAL SUPPORT

For technical assistance, please contact Genebio Solution's Technical Support at www.genebiosolution.com