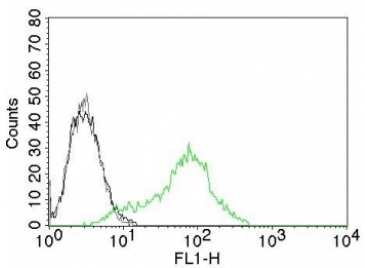
Ku70 + Ku80 CF488 Antibody for FACS / XRCC6 + XRCC5 Stable Green Fluorescence Flow Cytometry Antibody [clone KU729] (V2128CF488)

Catalog No.	Formulation	Size
V2128CF488-100T	500 ul at 0.1 mg/ml with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 Tests

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	CF488 Conjugate
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	KU729
Purity	Protein G affinity chromatography
Localization	Nuclear
Applications	Flow Cytometry : 5ul per test per one 10^6 cells in 0.1ml or 5ul per 100ul of whole blood Immunofluorescence : 1:50-1:100
Limitations	This Ku70 + Ku80 antibody is available for research use only.



Ku70 + Ku80 CF488 Antibody for FACS / XRCC6 + XRCC5 Stable Green Fluorescence Flow Cytometry Antibody. Flow cytometry analysis of permeabilized human 293T cells using Ku70 + Ku80 antibody clone KU729. Cells were fixed and permeabilized to enable intracellular detection of the nuclear Ku heterodimer. The green histogram (CF488-conjugated Ku70 + Ku80 antibody) shows a clear rightward shift compared to the black histogram (cells alone) and gray histogram (isotype control), indicating specific detection of XRCC6/XRCC5. The signal demonstrates low background and clean separation of positive populations, consistent with the stable fluorescence and reproducible performance of the CF488 conjugate across flow cytometry experiments.

Description

Ku70 (XRCC6) and Ku80 (XRCC5) form a nuclear heterodimer that plays a central role in DNA double-strand break repair through the non-homologous end joining pathway. This Ku70 + Ku80 CF488 Antibody for FACS is uniquely positioned for flow cytometry applications requiring stable green fluorescence and reliable intracellular detection. The CF488 fluorophore provides bright signal with low background, supporting clear identification of Ku-expressing cells in

fixed and permeabilized samples. Its performance characteristics make it well suited for experiments where signal clarity and reproducibility are critical for accurate data interpretation.

Ku70 + Ku80 antibody, also referred to as XRCC6 antibody or XRCC5 antibody, targets ubiquitously expressed nuclear proteins involved in maintaining genomic stability. Because Ku proteins are tightly associated with chromatin and localized within the nucleus, intracellular staining is required for detection. This Ku70 + Ku80 CF488 Antibody for FACS enables clean separation of positive and negative populations with minimal non-specific signal, allowing researchers to confidently distinguish true biological signal from background noise.

The clone KU729 antibody supports consistent intracellular detection across a range of cell types and experimental conditions. CF488 is engineered for excellent photostability, providing consistent signal across runs and reducing variability between experiments. This makes the Ku70 + Ku80 CF488 Antibody for FACS particularly valuable for longitudinal studies and workflows that demand reproducibility over time. Its stable emission profile also supports panel optimization in multicolor flow cytometry, where fluorophore compatibility and signal consistency are essential for accurate multiplex analysis.

Ku70 and Ku80 are members of the DNA repair protein family and function in coordination with DNA-dependent protein kinase to facilitate DNA end joining. Their nuclear localization and essential role in genome maintenance make them reliable intracellular markers for flow cytometry analysis. A CF488-conjugated Ku70 + Ku80 antibody provides a stable and reproducible detection strategy for researchers studying DNA repair, cellular stress responses, and genome integrity, while supporting low background staining and efficient panel design in complex flow cytometry experiments.

For target-specific DNA repair pathway investigations, see our Ku70 Antibody / DNA End Binding Protein Antibody and Ku80 Antibody / Non-Homologous End Joining Antibody pages featuring XRCC6- and XRCC5-associated DNA double-strand break repair validation data.

Application Notes

Optimal dilution of the Ku70 + Ku80 CF488 Antibody for FACS / XRCC6 + XRCC5 Stable Green Fluorescence Flow Cytometry Antibody should be determined by the researcher.

Immunogen

Nuclear extract of human HL-60 cells was used as the immunogen for this Ku70 + Ku80 CF488 Antibody for FACS / XRCC6 + XRCC5 Stable Green Fluorescence Flow Cytometry Antibody.

Storage

Store the Ku70 + Ku80 antibody at 2-8oC, protected from light.

Alternate Names

XRCC6 CF488 antibody, XRCC5 CF488 antibody, Ku70 CF488 FACS antibody, Ku80 CF488 flow cytometry antibody, Ku heterodimer CF488 antibody