

EMERGING AS ONE OF THE BRIGHTEST FLUORESCENT PROBES FOR FACS ANALYSIS. TYPICALLY, ONLY ONE APC MOLECULE IS CONJUGATED TO AN ANTIBODY. NONETHELESS, BY VIRTUE OF ITS HUGE ABSORPTION COEFFICIENT AND ALMOST PERFECT QUANTUM EFFICIENCY, AS WELL AS EMISSION IN A REGION OF THE SPECTRUM WITH EXTREMELY LOW CELLULAR AUTO-FLUORESCENCE, IT IS ONE OF THE BRIGHTEST DYES USED TODAY. IT EMITS AT ABOUT 680 NM, AND CAN BE EXCITED BY EITHER A DYE LASER (595-605 NM), OR THE CHEAPER HE NE LASER (633 NM).

ALLOPHYCOCYANIN HAS A GREAT UTILITY IN BIOMARKERS BECAUSE OF ITS HIGH FLUORESCENCE, BUT TYPICALLY IN COMBINATION WITH R-PE TO FORM A FLUORESCENT TANDEM PHYCOBILIPROTEIN CONJUGATE WHICH IMPROVES SENSITIVITY[2][3].

► PHARMACOLOGICALLY ACTIVE COMPOUND:

ALLOPHYCOCYANIN IS APPLIED IN HEALTH CARE PRODUCTS DUE TO CERTAIN FUNCTIONAL EFFECTS SUCH AS INHIBITION OF ENTEROVIRUS 71- INDUCED APOPTOSIS. AT CONCENTRATION NONTOXIC TO THE HOST CELLS ($0.045 \pm 0.012 \mu\text{M}$), ALLOPHYCOCYANIN WAS FOUND TO INHIBIT ENTEROVIRUS 71-INDUCED CYTOPATHIC EFFECTS, VIRAL PLAQUE FORMATION, AND VIRAL-INDUCED APOPTOSIS [4][5].

► COLORANT:

IT USED AS A FOOD COLORANT BECAUSE OF ITS ALGAL BASED SOURCE, HYDROPHILIC NATURE AND STABILITY AT ROOM TEMPERATURE.

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