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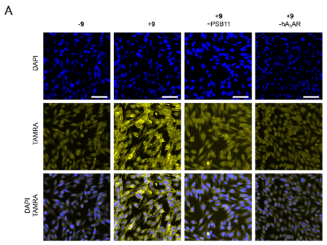
DATASHEET

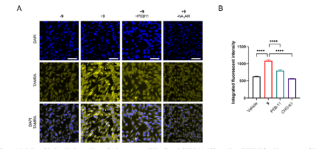
LUF7960

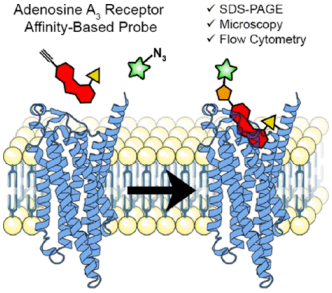
Product overview

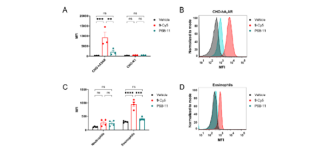
Name	LUF7960
Cat No	HB8396
Biological description	Novel, adenosine A_3AR Affinity-Based Probe (AfBP) which is suitable for click conjugation for use in confocal microscopy, SDS-PAGE and detection of endogenous hA_3AR in flow cytometry. Binds covalently to the hA_3AR (apparent pK_i values at A_1AR are 7.27 and 8.4 (following a 4h preincubation) *Sold under license from the Oncode Institute and Universiteit Leiden*
Biological action	Agonist
Purity	>98%
Description	Novel, clickable Adenosine hA_3AR Affinity-Based Probe (AfBP).

Images









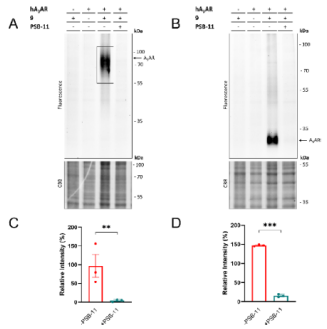
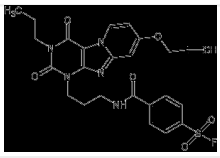


Figure 5. Labeling of the hA_3AR on live CHO cells. CHO cells with or without (first lane) stable expression of the hA_3AR were pre-incubated for 1 h with antagonist (PSB-11, 1 μM final concentration) at 37 °C, prior to incubation with 9 (50 nM final concentration) for 1 h at 37 °C. After the incubation, the unbound probe was washed away with PBS. Membranes were prepared, brought to a concentration of 1 ug/μL, and subjected to the copper-catalyzed click reaction with Cy5-N_3 (1 μM final concentration). Samples were then denatured with Laemmli buffer (4×), resolved by SDS-PAGE, and imaged using in-gel fluorescence. Gels were stained by Coomassie Brilliant Blue (CBB) as loading control. (A) Labeling of glycosylated hA_3AR. (B) Labeling of deglycosylated hA_3AR. PNGase was added prior to the addition of click reagents. (C, D) Quantification of the observed signals with and without addition of antagonist (PSB-11). The band intensities were calculated using ImageLab and corrected for the amount of protein measured after CBB staining. The band at 55 kDa of the PageRuler Plus ladder (not shown) was set to 100% for each gel and band intensities were calculated relative to this band. The mean values ± SEM of three individual experiments are shown. Significance was calculated by a two-way ANOVA test using multiple comparisons ($***p < 0.001$; $**p < 0.01$).

Solubility & Handling

Storage instructions	-20°C
Important	This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

Chemical Data

Chemical name	4-[3-(2,4-Dioxo-3-propyl-8-prop-2-ynoxypurino[7,8-a]pyridin-1-yl)propylcarbamoyl]benzenesulfonyl fluoride
Molecular Weight	541.55
Chemical structure	
Molecular Formula	$C_{25}H_{24}FN_5O_6S$
PubChem identifier	168510594
SMILES	CCCN1C(=O)C2=C(N=C3N2C=CC(=C3)OCC#C)N(C1=O)CCCNC(=O)C4=CC=C(C=C4)S(=O)(=O)F
InChiKey	GQJPGXUBGVKCMG-UHFFFAOYSA-N
Licensing details	Sold under license from the Oncode Cancer Institute and Universiteit Leiden

References

Development of an Affinity-Based Probe to Profile Endogenous Human Adenosine A(3) Receptor Expression.

Beerkens BLH et al (2023) Journal of medicinal chemistry 66

PubMedID 37531576