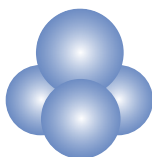


Product Specification Sheet

Product Name	pAAVS1-SA-T2A-Neo-CAG-EGFP-SV40pA Control Donor Vector
Description	<p>Human AAVS1 donor vectors are meticulously designed to target the human AAVS1 "safe harbor" site nestled within intron 1 of the PPP1R12C gene (protein phosphatase 1 regulatory subunit 12C). This specific locus is aptly called a "safe harbor" because it exerts minimal influence on cellular functions. It excels in supporting robust transcription, making it an ideal site for maintaining the expression of an externally introduced gene while mitigating the risk of unintentional integration elsewhere. Our latest-generation control donor vector incorporates an EGFP gene strategically positioned downstream of a CAG promoter and upstream of a poly-A tail. This setup ensures a straightforward pathway for achieving enduring and strong EGFP expression. Furthermore, by strategically integrating the Neomycin selection marker with a splice acceptor (SA) site within the intronic region of the AAVS1 safe harbor locus, independent of its own promoter, Neomycin-resistant gene expression becomes closely tied to intron integration. This significantly reduces the risk of unintended off-target integrations when employing G418 selection. The pAAVS1-SA-T2A-Neo-CAG-EGFP-SV40pA Vector, when used in conjunction with the SpCas9 nuclease and gRNA expression vector, enables the seamless integration of EGFP into the AAVS1 safe harbor site, making it an effective integration marker.</p>
Catalog Number	AC9312
Size	10 µg at 0.5 µg/µL in TE
Shipping	Room temperature
Storage and Stability	Store at -20°C immediately upon receipt. This product is stable for 6 months when stored as directed.
Quality Control	This plasmid is sequence verified.
Safety Precaution	This product does not contain any hazardous materials with occupational exposure limits. Nevertheless, ALSTEM strongly advises anyone handling this product to use suitable protective eyewear, such as chemical safety goggles or protective glasses, along with gloves and appropriate clothing to prevent skin contact.
Restricted Use	For Research Use Only. Not for use in diagnostic or therapeutic procedures.



ALSTEM, INC

2600 Hilltop Drive, BLDG B, STE C328, Richmond, CA 94806

Tel: (510) 708-0096

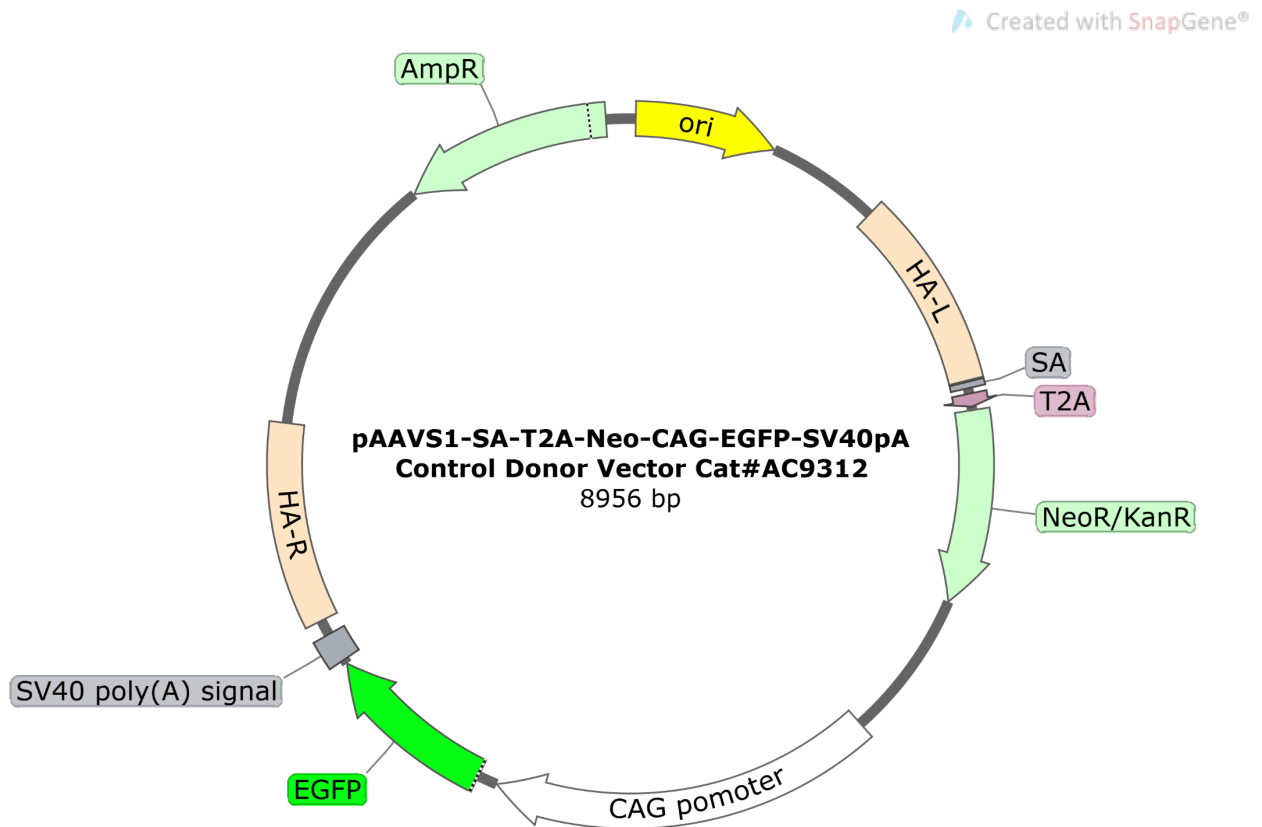
Fax: (866) 605-8766

www.alstembio.com

info@alstembio.com

Vector Information

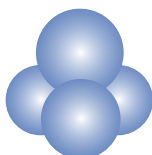
This AAVS1 donor vector includes essential components to serve as a reliable integration marker in the AAVS1 Safe Harbor site. It incorporates a universal SA-T2A-NeoR cassette, facilitating the integration of EGFP controlled by a CAG promoter into the AAVS1 safe harbor site through antibiotic selection. This vector is suitable for generating stable cell lines.



Note: Bacterial culture of AAVS1 vectors should be done in medium containing 100 µg/mL Carbenicillin. For maximal plasmid yield and quality, we recommend Stbl3 competent cells (Invitrogen).

IMPORTANT NOTICE

Store the vial at -20°C immediately upon receipt.



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