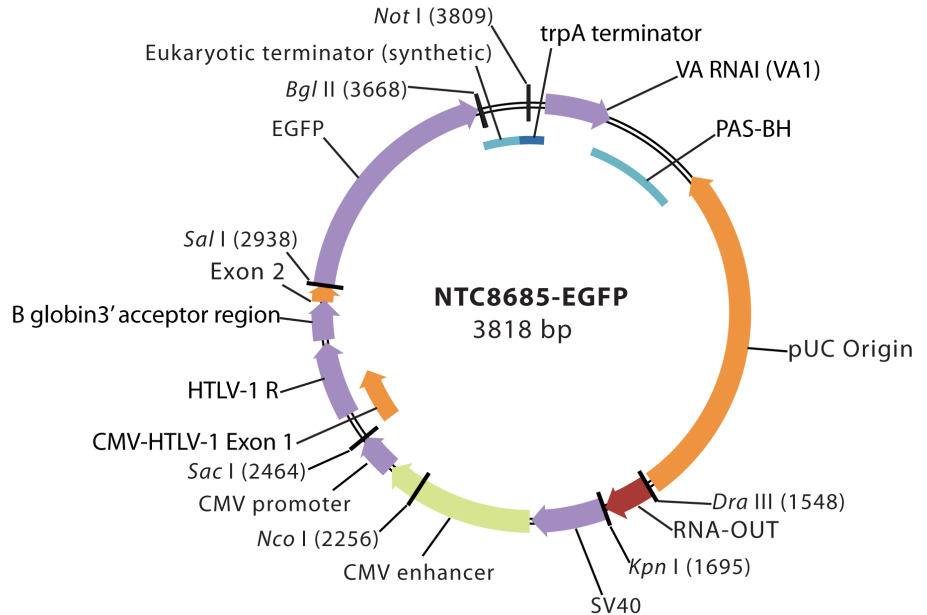


Mammalian Expression Vectors

NTC Vector Advantages:

- DNA Vaccination
- Therapeutic Vector
- Native Expression
- Secreted (TPA tag)
- Minimal Backbone
- Reporter (EGFP)
- Regulatory Compliance
- Simultaneous Cloning
- **20% Large scale production savings**

Plus, choose from the following special advantages included on the Vector Selection Flowchart below.



A typical advanced NTC vector, NTC8685-EGFP, with the following features: markerless (sucrose selection), enhanced transcription (SV40/CMV), enhanced translation (CMV/HTLV-1-R), enhanced translation (VA1), enhanced plasmid production (PAS-BH).

Vector Selection Flowchart

Selection	Transgene Targeting	HTLV-1 R transient expression enhancer	VA1 transient expression enhancer	SV40-PAS-BH increased plasmid yield backbone	RIG-I activating backbone	Vector
Kan	Secreted; GPI anchored; Proteosome; Endosome; or Native	No	No	No	No	pDNAVACCUltra
Sucrose	Secreted; or Native	Yes	No	No	No	NTC8382 NTC8385
Sucrose	Secreted; or Native	Yes	Yes	No	No	NTC8382-VA1 NTC8385-VA1
Kan	Secreted; or Native	Yes	No	Yes	No	NTC7482 NTC7485
Kan	Secreted; or Native	Yes	Yes	Yes	Yes	NTC7482-eRNA41H NTC7485-eRNA41H
Sucrose	Secreted; or Native	Yes	No	Yes	No	NTC8482 NTC8485
Sucrose	Secreted; or Native	Yes	Yes	Yes	Yes	NTC8482-eRNA41H NTC8485-eRNA41H
Sucrose	Secreted; or Native	Yes	Yes	Yes	No	NTC8682 NTC8685

*** Save 20% off large scale production cost with NTC's high-yield, SV40-PAS-BH vectors!**

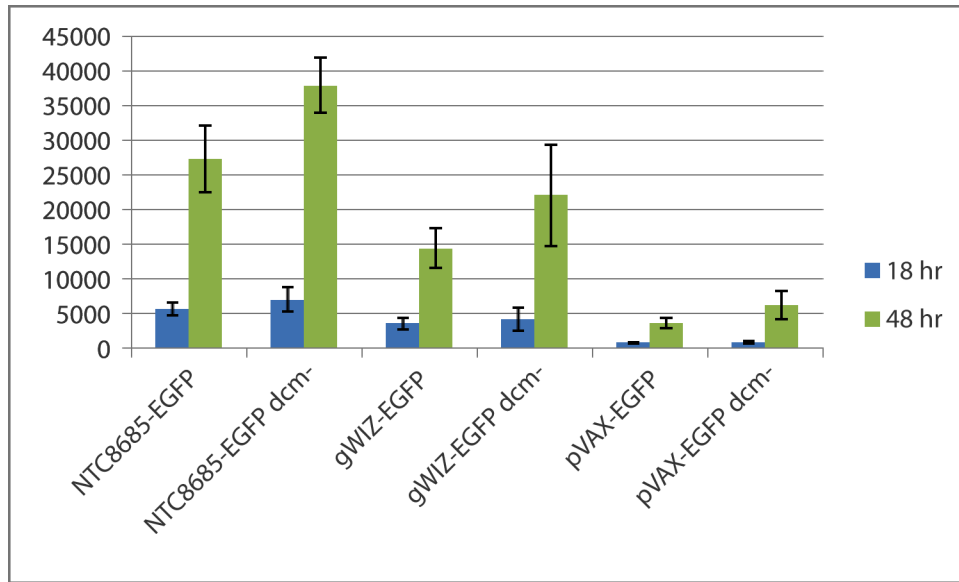


Figure 1: EGFP transgene expression (fluorescence) in human HEK293 cell line after transfection of dcm+ or dcm- NTC8685, gWIZ and pVAX1 CMV promoter plasmid vectors.

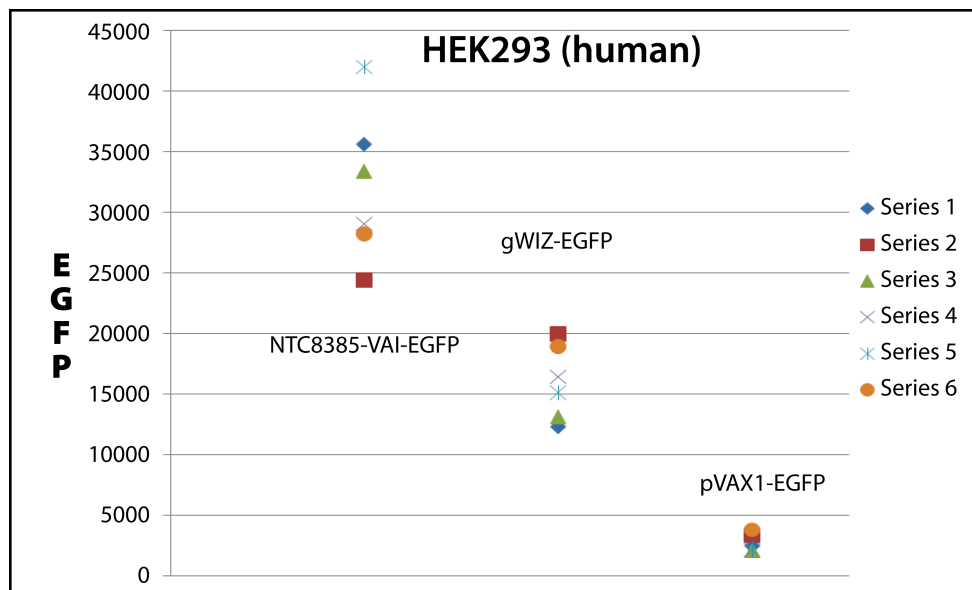


Figure 2: NTC8385-VA1 expression compared to gWIZ-EGFP and pVAX1-EGFP in HEK293 cells.