

# CELL CULTURE

## VACCINE ADJUVANTS

### Shape the adaptive immune response

- ❖ VacciGrade™ guarantees purity and sterility
- ❖ Largest choice of vaccine adjuvants
- ❖ Create your own adjuvant mix

Intensive research focuses on optimizing the use of vaccine adjuvants to not only enhance, but orientate specific Th1 or Th2 adaptive immune responses to antigens. InvivoGen provides a thoroughly tested and extensive range of adjuvants, in a guaranteed sterile VacciGrade™, for preclinical studies. InvivoGen's collection includes the approved alum and oil emulsions and promising pattern recognition receptor (PRR) ligands. Boost your adjuvant research today by choosing from the number one adjuvant collection.

#### Choose from our extensive collection:

##### Alum and emulsions:

Alhydrogel®, AddaVax™, IFA and more.

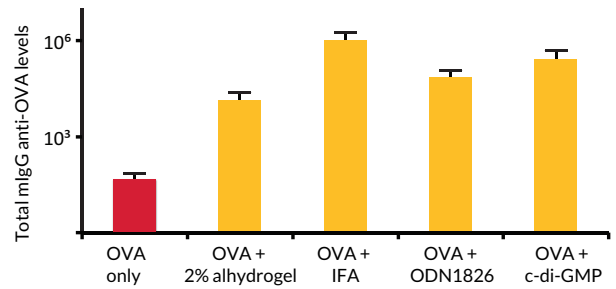
##### PRR ligands:

MPLA, Poly(I:C), c-di-GMP, CpG ODNs and more.

[www.invivogen.com/vaccine-adjuvants](http://www.invivogen.com/vaccine-adjuvants)

# Vaccine Adjuvants

InvivoGen provides the largest choice of preclinical grade vaccine adjuvants (for research use only), that are either already approved for use in human vaccination or are still under investigation. These include particulate adjuvants, such as alum and emulsions, as well as molecules known to activate pattern recognition receptors (PRR) such as CpG ODNs, MPLA, Poly(I:C), and cyclic dinucleotides. InvivoGen's adjuvants are prepared under strict aseptic conditions and are therefore guaranteed sterile. Additionally, they are thoroughly tested for the presence of endotoxins and to ensure lot-to-lot reproducibility.



OVA specific antibodies in serum of immunized mice were evaluated 30 days post subcutaneous injection with the OVA antigen alone or in combination with different adjuvants from InvivoGen.

PRODUCT	DESCRIPTION	QTY	CAT. CODE
<b>ALUM AND EMULSIONS</b>			
AddaS03™	AS03 -like squalene-based adjuvant - Vaccigrade™	10 ml	vac-as03-10
AddaVax™	Squalene-Oil-in-water - Th1/Th2 response	10 ml	vac-adx-10
Adju-Phos® adjuvant	Aluminium phosphate gel - Th2 Response	250 ml	vac-phos-250
Alhydrogel® adjuvant	2% Aluminium hydroxide gel (Alum) - Th2 Response	50ml *	vac-alu-50
CFA	Complete Freund's Adjuvant - Th1 response	10 ml *	vac-cfa-10
IFA	Incomplete Freund's adjuvant - Th2 response	10 ml *	vac-ifa-10
Quil-A® adjuvant	Purified triterpenoid saponin	1 g	vac-quil
<b>PRR LIGANDS</b>			
2'3'-c-di-AM(PS)2 (Rp,Rp) Vaccigrade™	2'3' bisphosphorothioate analog of c-di-AMP - STING agonist	500 µg	vac-nacda2r
2'3'-cGAMP Vaccigrade™	Cyclic [G(2',5')pA(3',5')p] - STING agonist	1 mg	vac-nacga23
c-di-AMP Vaccigrade™	Cyclic diadenylate monophosphate - STING agonist	1 mg	vac-nacda
c-di-GMP Vaccigrade™	Cyclic diguanylate monophosphate - STING agonist	1 mg	vac-nacdg
CL401 Vaccigrade™	Chimeric molecule - TLR2 & TLR7 agonist	5 mg	vac-c401-5
CL413 Vaccigrade™	Chimeric molecule - TLR2 & TLR7 agonist	5 mg	vac-c413-5
CL429 Vaccigrade™	Chimeric molecule - TLR2 & NOD2 agonist	5 mg	vac-c429
Flagellin FlIC Vaccigrade™	Recombinant flagellin from S. typhimurium - TLR5 agonist	50 µg	vac-fla
Imiquimod Vaccigrade™	Imidazoquinoline compound -TLR7 agonist	5 mg	vac-imq
LPS-EB Vaccigrade™	Lipopolysaccharide from E. coli 0111:B4 strain - TLR4 agonist	5 x 10 <sup>6</sup> EU	vac-3pelps
MPLA-SM* Vaccigrade™	Monophosphoryl lipid A from S. minnesota R595 - TLR4 agonist	1 mg	vac-mpla2
MPLAs Vaccigrade™	Synthetic monophosphoryl lipid A - TLR4 agonist	1 mg	vac-mpls
ODN 1585 Vaccigrade™	CpG ODN, Class A (murine) - TLR9 agonist	1 mg	vac-1585-1
ODN 1826 Vaccigrade™	CpG ODN, Class B (murine) - TLR9 agonist	1 mg	vac-1826-1
ODN 2006 Vaccigrade™	CpG ODN, Class B (human) - TLR9 agonist	1 mg	vac-2006-1
ODN 2395 Vaccigrade™	CpG ODN, Class C (human/murine) - TLR9 agonist	1 mg	vac-2395-1
Pam3CSK4 Vaccigrade™	Synthetic triacylated lipoprotein - TLR1/2 agonist	1 mg	vac-pms
Poly(I:C) (HMW) Vaccigrade™	Polyinosine-polycytidylic acid -TLR3 agonist	10 mg	vac-pic
R848 Vaccigrade™	Imidazoquinoline compound -TLR7/8 agonist	5 mg	vac-r848
TDB Vaccigrade™	Synthetic analog of the cord factor - Mincle agonist	2 mg	vac-tdb
<b>CONJUGATABLE PRR LIGANDS</b>			
STG-982 Vaccigrade™ <b>NEW</b>	STING agonist with a maleimide group	250 µg *	vac-stg982
STG-968 Vaccigrade™ <b>NEW</b>	STING agonist with an azido group	250 µg *	vac-stg968
TL7-887 Vaccigrade™ <b>NEW</b>	TLR7 agonist with a maleimide group	250 µg *	vac-tl7887
TL7-975 Vaccigrade™ <b>NEW</b>	TLR7 agonist with an azido group	250 µg *	vac-tl7975

\* Available different quantities