



INNOVATION



COMMITMENT



EXPERTISE

Vaccines from Virbac

*Protecting pets and
the future growth
of your practice*

Shaping the future
of animal health

Virbac

Cat Vaccines



Virbac are proud to supply vaccines to Cats Protection.



A streamlined range of vaccines with a straightforward protocol to provide excellent protection against the core feline diseases ^{1,2}



Leucogen®

The world's first subunit vaccine for cats containing recombinant purified p45 FeLV-envelope antigen, identified as the most important antigen for stimulating immunity to FeLV. Provides targeted and effective antigenic challenge.

- **3 year duration of immunity** after the 1st annual booster providing enhanced protection and the ability to reduce vaccination for the cat.
- **High efficacy against FeLV** – 93% preventable fraction³ and 73% of cats are protected against persistent viraemia 3 weeks after their 1st vaccine injection⁴. Protects against all 3 subgroups of FeLV.
- **Superior preventative fraction** vs Canarypox-vectored vaccine – 87% for Leucogen vs 78%⁵.
- **Proven safety and efficacy**^{2,6}.
- **Purification process** ensures high quality of p45 protein in the final product.
- **Increased life expectancy** by >5 years in vaccinated cats⁵.



Feligen® RCP

A modified live attenuated vaccine for the active immunisation of healthy cats and kittens against feline rhinotracheitis virus (FHV), feline calicivirus (FCV) and feline panleucopaenia virus (FPV).

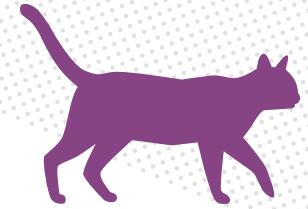
- **100% modified live attenuated vaccine** – all 3 strains are live attenuated strains. Modified live vaccines offer better protection by closely mimicking protection from natural infection⁷.
- **Rapid onset of immunity for FCV** – 3 weeks after the 1st injection of primary vaccination and demonstrated a higher level of protection than Purevax RCP FeLV after 1 single injection⁸.
- **Proof of FCV cross-protection** - FCV F9 is genetically very close to recent FCV strains isolated in the field in the UK⁹. 97% cross-protection demonstrated against field strains for FCV, from the largest prospective analysis of FCV diversity and antigenic cross-protection at a European level¹⁰. Modified live FCV F9 vaccination has been shown to elicit a cellular cross-reactive immunity against a heterologous FCV field strain¹¹.
- **Proof of CPV cross-protection** - cats vaccinated with Feligen RCP developed acquired immunity against CPV variants¹².



Leucofeligen® FeLV/RCP

A fully authorised combination vaccine that combines all of the features and benefits provided by Leucogen and Feligen RCP to provide comprehensive protection against the 4 core feline viruses in a single vaccine.

- **Synergistic effect of Leucogen® with Feligen® RCP on FCV & FHV** - higher serological response against FCV and FHV¹³, 82.6% clinical protection for FCV even with a heterologous calicivirus strain¹⁴ and more effective than Purevax RCP FeLV in terms of decrease of clinical signs, their duration and viral excretion for FCV¹⁵.
- **3 year duration of immunity against FeLV** after the 1st annual booster.
- **Convenient** – broad spectrum protection in a single injection.
- **Proven safety & efficacy**^{2,6}



**3 year duration
of immunity*
for FeLV with
Leucogen &
Leucofeligen**



*Following primary course and first annual booster.

Shaping the future
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Vaccine Protocol for Kittens and Cats

Primary Vaccine Course

8-9 Weeks



Leucofeligen

12 Weeks



Leucofeligen



1st Annual Booster



Leucofeligen

2nd Annual Booster



Feligen RCP

3rd Annual Booster



Feligen RCP

4th Annual Booster



Leucofeligen

Recommended 3 Year DOI Booster Schedule

The Benefit of Adjuvants



Adjuvants are vaccine additives that boost immunity. They provide artificial signals to the immune system to initiate the immune response.

Both our Leucogen and Leucofeligen vaccines are adjuvanted to enhance both the humoral and cell-mediated immune response; both of which are critical for protection against FeLV.

The adjuvants used in our cat vaccines are a combination of QA-21 and aluminium hydroxide - both of which have been used extensively in human and veterinary medicine.

Aluminium hydroxide stimulates the humoral response for antibody production, whilst QA-21 is a well known inducer of the cell mediated response. The inclusion of these adjuvants ensures the efficacy of Virbac's leukaemia component and also has the benefit of enhancing the immune response to the RCP components (Fig.2).

Adjuvants drive a stronger, longer (DOI), faster (OOI) immune response!

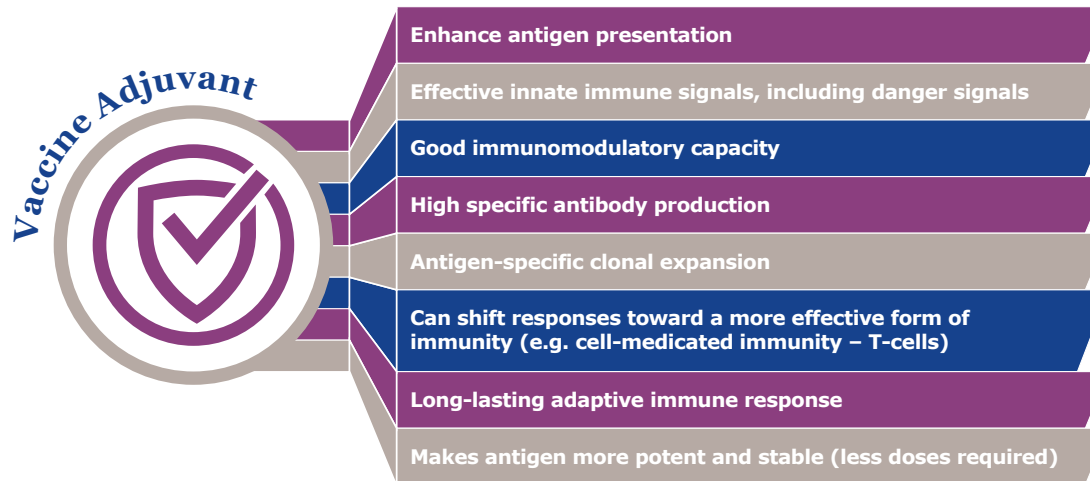


Fig 1. Characteristic Properties of Vaccine Adjuvants. Adapted from Bonam et al (2017)¹⁶

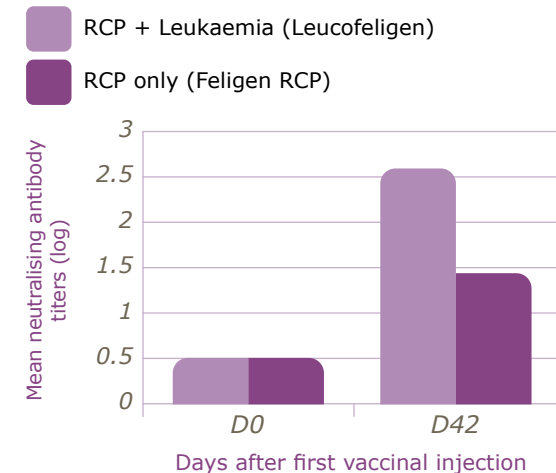


Fig 2. Virbac R&D study¹⁵ comparing antibody titres for using adjuvanted vs non-adjuvanted vaccines. At 42 days after first vaccination the adjuvanted combination (Leucofeligen) significantly increased the neutralising antibody levels to all three components compared to the Feligen RCP vaccine. All three (FCV, FHV and FPV) components were enhanced, illustrating that adjuvants can enhance an already efficacious vaccine.

Dog Vaccines



A flexible and convenient vaccine range to create the optimal regime for your client's needs



Distemper, Hepatitis and Parvovirus



Canigen DHP/DHPPi vaccines offer a 3 year duration of immunity against distemper, hepatitis and parvovirus. Our choice of vaccines allows you to tailor your vaccine programme to the individual pet.



Canigen® DHP

Modified live vaccine containing canine distemper virus, canine adenovirus and canine parvovirus.

- **Early protection** – a first dose may be given to puppies from 6 weeks of age
- **Rapid onset of immunity** of just one week
- **3 year duration of immunity**
- **Good compatibility** – can be administered at the same time as Canigen Lepto 4, Canigen Rabies, Canigen KC & Canigen Bb



Canigen® DHPPi

Modified live vaccine containing canine distemper virus, canine adenovirus, canine parvovirus and canine parainfluenza.

- **Early protection** – a first dose may be given to puppies from 6 weeks of age
- **3 year duration of immunity** for the DHP component
- **Good compatibility** – can be administered at the same time as Canigen Lepto 4, Canigen Rabies & Canigen Bb

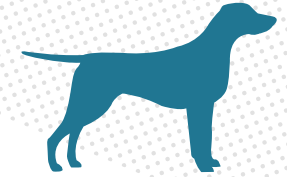


Canigen® Parvo-C

Modified live vaccine containing canine parvovirus Type 2 (CPV-2).

- **Rapid onset of immunity** of just 1 week
- **3 year duration of immunity**
- **Single injection** establishes active immunity in dogs >10 weeks of age
- **Early protection** – can be given to puppies from 4 weeks of age
- **Cross-protection** - strain C154 protects against Types 2, 2b and 2c¹⁷.





Canixin® DHPPi/L

Modified live vaccine containing canine distemper virus, canine adenovirus, canine parvovirus and canine parainfluenza virus, combined with a suspension of inactivated Leptospira interrogans serovar Canicola and Leptospira interrogans serovar Icterohaemorrhagiae.

- **Convenient and cost-effective** vaccine protecting against distemper, hepatitis, parvovirus, parainfluenza and leptospirosis in a single product
- **Use from 8 weeks of age** with the second injection of the primary course 3-4 weeks later
- Ideal for practices where a straightforward vaccine protocol is advantageous or an L2 vaccine for leptospirosis is preferred



Leptospirosis Vaccines



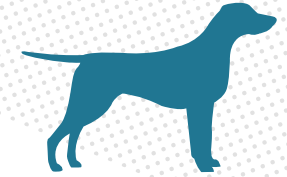
Canigen® Lepto4

Inactivated vaccine containing:

Leptospira interrogans serogroup Canicola serovar Portland-vere
Leptospira interrogans serogroup Icterohaemorrhagiae serovar Copenhageni
Leptospira interrogans serogroup Australis serovar Bratislava
Leptospira kirschneri serogroup Grippityphosa serovar Dadas.

- **Early protection** – can be administered from 6 weeks of age with the second vaccine in the primary course from 10 weeks
- **Good compatibility** – can be administered at the same time as Canigen DHP, Canigen DHPPi, Canigen KC & Canigen Bb
- 3 week onset of immunity
- **12 month duration of immunity** in line with annual booster vaccinations





Canixin® L

Inactivated vaccine containing two serovars of Leptospirosis:

Leptospira interrogans serogroup Canicola serovar Canicola

Leptospira interrogans serogroup Icterohaemorrhagiae serovar Icterohaemorrhagiae

- Onset of immunity: 2 weeks for *Leptospira Icterohaemorrhagiae* and 5 weeks for *Leptospira Canicola*
- **12 month duration of immunity** in line with annual booster vaccinations



Bordetella bronchiseptica & Canine Parainfluenza Vaccines



Canigen® KC

Modified live vaccine containing Bordetella bronchiseptica and canine parainfluenza virus.

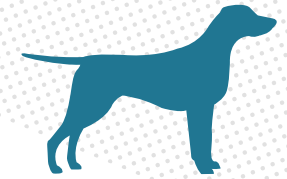
- **Low volume** - 0.4ml for intra-nasal administration into a single nostril
- **Early protection** – can be administered from 3 weeks of age
- **Rapid onset of immunity** – just 72 hours for Bordetella bronchiseptica and 3 weeks for canine parainfluenza virus
- **12 month duration of immunity** to coincide with annual booster vaccinations
- Can be used concurrently with Canigen DHP & Canigen Lepto 4



Canigen® Bb

Inactivated subunit vaccine for active immunisation against Bordetella bronchiseptica by subcutaneous injection for when intra-nasal Bordetella bronchiseptica vaccination is not possible or preferred.

- **Convenient** ready to use formula presented in a 10ml multi-dose bottle
- Can be **stored at room temperature** (up to 25°C) for up to 4 weeks after broach
- **Extends protection** against Bordetella bronchiseptica in dogs vaccinated with Canigen KC in the last 12 months for a further year with a single dose
- Dogs can be vaccinated from 6 weeks of age
- Can be administered concurrently (at the same time but separate injections) with Canigen DHP, Canigen DHPPI, Canigen Pi & Canigen Lepto 4



Canigen® Pi

Modified live vaccine containing canine parainfluenza virus.

- Annual vaccination schedule
- Can be used in intermediate years with Canigen Lepto 4
- **Compatible with Canigen Bb** to provide protection against canine parainfluenza virus where injectable vaccination is preferred



Example
Dog Vaccine Protocol
 Canigen DHP & Canigen Lepto 4

Primary Vaccine Course

6-8 Weeks

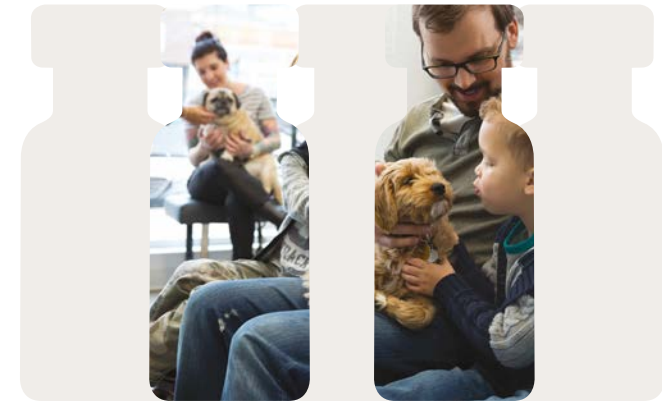


Canigen DHP & Canigen L4

10-12 Weeks



Canigen DHP & Canigen L4



1st Annual Booster



Canigen DHP & Canigen L4

2nd Annual Booster



Canigen L4

3rd Annual Booster



Canigen L4

4th Annual Booster



Canigen DHP & Canigen L4

Optional Vaccine



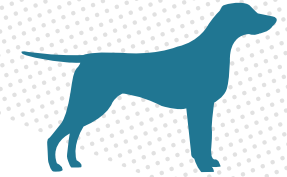
Canigen KC Annual Booster

Notes: Second L4 should be given 4 weeks after the first. Second DHP vaccinations should not be before 10 weeks of age. In situations of high risk, an additional Canigen Parvo-C may be advisable at 16-20 weeks. If a puppy >10 weeks of age has received a first vaccine elsewhere that is not a Canigen brand, please offer a Canigen Lepto 4 vaccine 4 weeks after the 2nd puppy vaccination. This ensures two Leptospirosis vaccines of the same brand are given in the primary course.

Example

Dog Vaccine Protocol

Using Canigen KC with Canigen Bb



Primary Vaccine Course

6-8 Weeks

Canigen DHP & Canigen L4

4 Weeks Later

Canigen DHP, Canigen L4 & Canigen KC

Our dedicated team of veterinary advisors are on hand to offer advice on tailoring your vaccine protocol to suit your client's needs. Contact us to discuss your requirements.



Booster Schedule

1st Annual Vaccination

Canigen DHPi, Canigen L4 & Canigen Bb

2nd Annual Vaccination

Canigen L4, Canigen Pi & Canigen Bb

3rd Annual Vaccination

Canigen L4, Canigen Pi & Canigen Bb

4th Annual Vaccination

Canigen DHPi, Canigen L4 & Canigen Bb

Notes: Second L4 should be given 4 weeks after the first. Second DHP vaccinations should not be before 10 weeks of age. In situations of high risk, an additional Canigen Parvo-C may be advisable at 16-20 weeks. If a puppy >10 weeks of age has received a first vaccine elsewhere that is not a Canigen brand, please offer a Canigen Lepto 4 vaccine 4 weeks after the 2nd puppy vaccination. This ensures two Leptospirosis vaccines of the same brand are given in the primary course.

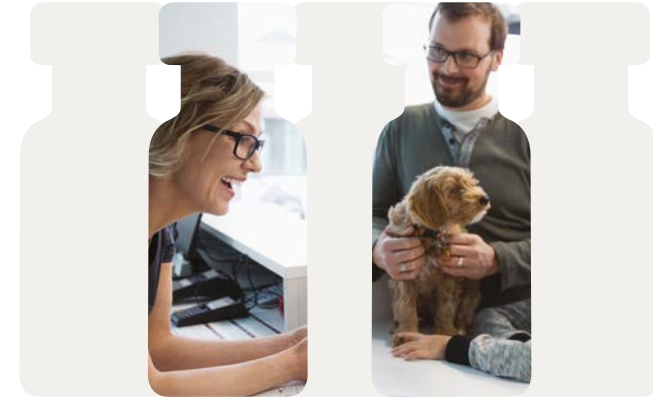
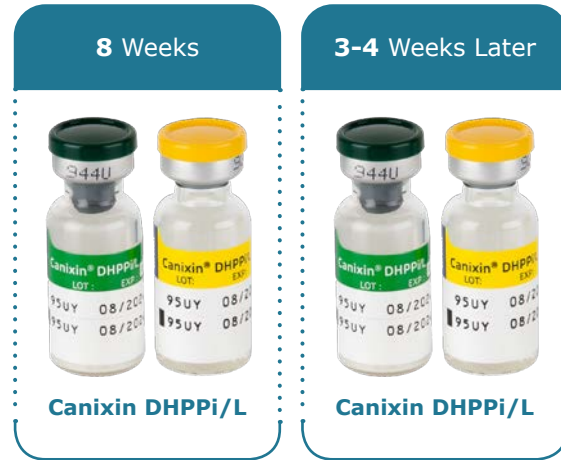
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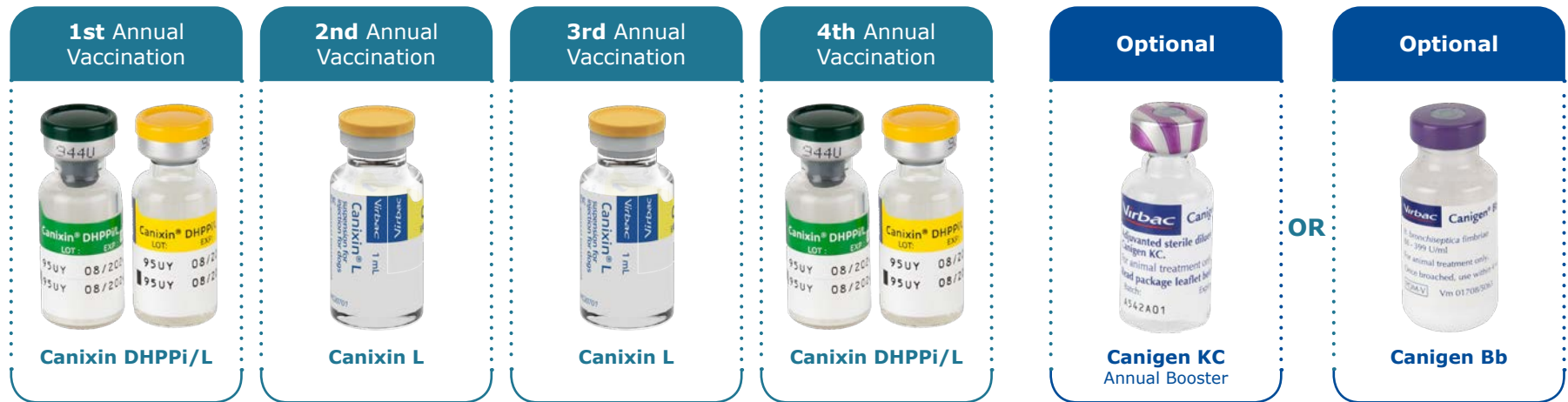
Example Dog Vaccine Protocol

Canixin L & DHPPi/L with optional kennel cough

Primary vaccine course



Booster schedule



Notes: Second vaccine should be 3-4 weeks after the first. In situations of high risk, an additional Canigen Parvo-C may be advisable at 16-20 weeks. If a puppy has received a first vaccine elsewhere that is not a Canixin vaccine please offer a second Canixin vaccine 3-4 weeks after the 2nd puppy vaccination. Adult restart: Canixin DHPPi/L then 3-4 weeks later Canixin DHPPi/L. Canigen KC/Canigen Bb are not licensed to be administered on the same day as Canixin vaccines and a 2 week gap is recommended. Canigen KC is recommended to be given from 3 weeks of age and Canigen Bb is recommended from 6 weeks of age.



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Rabies Vaccine

for Cats & Dogs



Canigen® Rabies

An inactivated rabies vaccine to reduce clinical signs and mortality in dogs and cats.

- **Rapid onset of immunity** - an adequate serological response (≥ 0.5 IU) has been demonstrated 2 to 3 weeks after vaccination
- **3 year duration of immunity** provides enhanced protection and reduces the number of vaccinations required
- **Single dose** primary course from 12 weeks of age

Also available
Virbagen® Omega



Dogs

- Licensed for the treatment of parvovirus in dogs.
- 4-fold reduction in mortality in parvovirus cases.¹⁸
- Reduces clinical signs of parvovirus from 1 month of age.
- 2.5 MU/Kg IV once daily for 3 days.

Cats

- Licensed for the treatment of FeLV and/or FIV infected cats.
- Reduces mortality in FeLV cats.
- Improves clinical scores in both FeLV and FIV cases.
- Use for non-terminal clinical stages, from the age of 9 weeks old.
- 1MU/kg SC; 5 day courses on days 0, 14 and 60.

**Veterinary licensed
interferon, containing
10MU of purified feline
recombinant interferon.**

- Antiviral
- Antiproliferative
- Immunomodulatory



Support

Support available from Virbac

Vaccine Amnesty Packages



We all lead busy lives and so it's little wonder that a proportion of clients miss their pet's yearly booster.

The increased cost of a 'restart' course can be prohibitive, putting some pets at risk.

One way of getting these clients back and retaining loyalty is to carry out a vaccine amnesty.

What is a vaccine amnesty?

Virbac can offer practices a 'restart' vaccination course for the price of a single booster over a one-month period of your choice. We can provide you with materials including letters, vouchers and posters, available digitally, to promote your amnesty. Please speak to your Virbac Territory Manager for further details.

Benefits to your practice

- Regain lost clients.
- Sign up new clients.
- Diagnose underlying diseases.
- Good PR for your practice.
- Increase awareness and owner compliance.

Amnesty poster



Amnesty voucher



Amnesty postcard

Materials for your waiting room

To support all of our vaccines there are a range of materials available for your practice. Contact your Virbac Territory Manager to order any of our materials.



Cat vaccination leaflet



Dog vaccination leaflet



Waiting room/social media video

Print Service

Virbac Individual Printing

VIP



Our VIP service has been specially developed for vaccine customers. Take advantage of our free printing and design services, where you can produce vaccination certificates and booster reminder cards which can all be tailor made to suit your practice.

Our easy-to-use templates give you the flexibility to personalise your materials as much as you like, from simple modifications to developing a unique design from scratch.

Designed for minimal complication but maximal output, Virbac VIP will offer you:

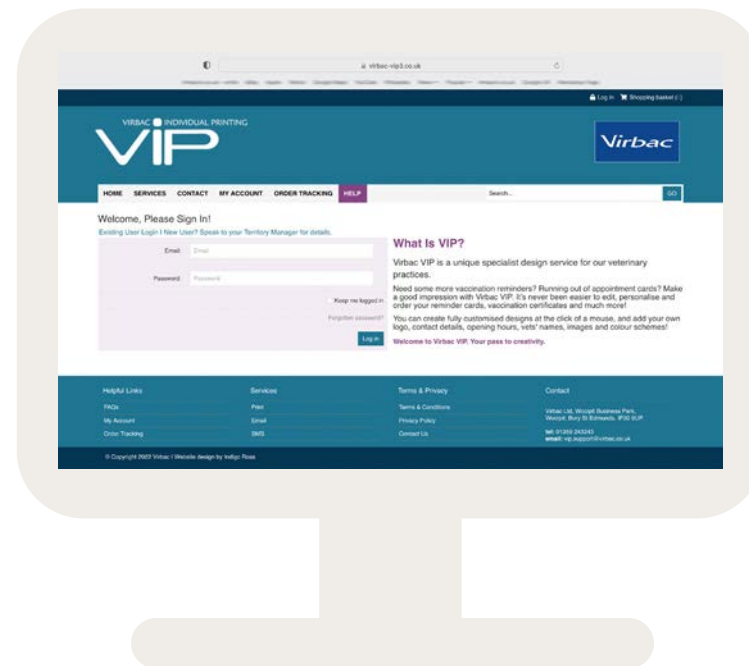
- Starter templates for vaccine certificates and booster reminders.
- Simple step-by-step creativity tools.
- A wide range of images, colours and fonts to choose from.
- The ability to upload your own bespoke images, logos and even PDFs.
- Immediate proof availability for download (to check picture resolution and quality).
- A portal to upload customer addresses to print customer-specific booster reminders.
- The option to arrange posting directly to customers from print.
- SMS services also available for you to contact your clients.



Vaccination record certificate



Dog and Cat Booster reminder cards



References:

1. Leucogen, Feligen RCP & Leucofeligen Summary of Product Characteristics.
2. Jarrett O et al. Comparative studies of the efficacy of a recombinant feline leukaemia, The Veterinary Record 1996; 138:7-11.
3. Hofmann-Lehmann, R.; Holzmagel, E.; Aubert, A.; Ossent, P.; Reinacher, M.; Lutz, H. Recombinant FeLV Vaccine: Long-Term Protection and Effect on Course and Outcome of FIV Infection. Vet. Immunol. Immunopathol. 1995, 46, 127–137, doi:10.1016/0165-2427(94)07012-V.
4. Arcidiaco, S.; Schreiber, P.; Fontaine, C.; Loukeri, S.; Poincelot, L.; Lesbros, C.; Gueguen, S. Onset of Protection of FeLV Vaccine after One Single Injection in Cats. Presented at the SEVC 2023, Spain.
5. Hofmann-Lehmann, R.; Cattori, V.; Tandon, R.; Boretti, F.S.; Meli, M.L.; Riond, B.; Pepin, A.C.; Willi, B.; Ossent, P.; Lutz, H. Vaccination against the Feline Leukaemia Virus: Outcome and Response Categories and Long-Term Follow-Up. Vaccine 2007, 25, 5531–5539, doi:10.1016/j.vaccine.2006.12.022.
6. Lutz H. Comparative studies of the efficacy of two leukaemia virus vaccines. Proceedings of the 4th European FECAVA Congress 1998.
7. Stone, A.E.S.; Brummet, G.O.; Carozza, E.M.; Kass, P.H.; Petersen, E.P.; Sykes, J.; Westman, M.E. 2020 AAHA/AAFP Feline Vaccination Guidelines*. J. Am. Anim. Hosp. Assoc. 2020, 56, 249–265, doi:10.5326/JAAHA-MS-7123.
8. Arcidiaco, S.; Schreiber, P.; Fontaine, C.; Loukeri, S.; Poincelot, L.; Lesbros, C.; Gueguen, S. Comparative Efficacy of Two FCV Vaccines after One Single Injection in Cats. Presented at the SEVC 2023, Spain.
9. Hou, J.; Sánchez-Vizcaíno, F.; McGahie, D.; Lesbros, C.; Almeras, T.; Howarth, D.; O'Hara, V.; Dawson, S.; Radford, A.D. European Molecular Epidemiology and Strain Diversity of Feline Calicivirus. Vet. Rec. 2016, 178, 114–115, doi:10.1136/vr.103446
10. Afonso, M.M.; Pinchbeck, G.L.; Smith, S.L.; Daly, J.M.; Gaskell, R.M.; Dawson, S.; Radford, A.D. A Multi-National European Cross-Sectional Study of Feline Calicivirus Epidemiology, Diversity and Vaccine Cross-Reactivity. Vaccine 2017, 35, 2753–2760, doi:10.1016/j.vaccine.2017.03.030.
11. Spiri, A.M.; Novacco, M.; Meli, M.L.; Stirn, M.; Riond, B.; Fogle, J.E.; Boretti, F.S.; Herbert, I.; Hosie, M.J.; Hofmann-Lehmann, R. Modified-Live Feline Calicivirus Vaccination Elicits Cellular Immunity against a Current Feline Calicivirus Field Strain in an Experimental Feline Challenge Study. Viruses 2021, 13, 1736, doi:10.3390/v13091736
12. Gillet, M.; Arcidiaco, S.; Almeras, T.; Lesbros, C.; Fournel, S.; Fontaine, C.; Gueguen, S. Seroneutralisation of Canine Parvovirus by Sera of Cats Vaccinated with Either Leucofeligen™ FeLV/RCP or Feligen™ CRP Vaccines. Presented at the 27th ECVIM-CA Congress 2017, Malta.
13. Gueguen, S.; Martin, V.; Bonnet, L.; Saunier, D.; Mähl, P.; Aubert, A. Safety and Efficacy of a Recombinant FeLV Vaccine Combined with a Live Feline Rhinotracheitis, Calicivirus and Panleukopenia Vaccine. Vet. Rec. 2000, 146, 380–381, doi:10.1136/vr.146.13.380-b.
14. Lesbros, C.; Martin, V.; Najbar, W.; Sanquer, A.; McGahie, D.; Eun, H.-M.; Gueguen, S. Protective Efficacy of the Calicivirus Valency of the Leucofeligen Vaccine against a Virulent Heterologous Challenge in Kittens. Vet. Med. Int. 2013, 1–7, doi:10.1155/2013/232397.
15. Almeras, T.; Schreiber, P.; Fournel, S.; Martin, V.; Nicolas, C.S.; Fontaine, C.; Lesbros, C.; Gueguen, S. Comparative Efficacy of the Leucofeligen™ FeLV/RCP and Purevax™ RCP FeLV Vaccines against Infection with Circulating Feline Calicivirus. BMC Vet. Res. 2017, 13, 300, doi:10.1186/s12917-017-1217-y.
16. Bonam, Srinivasa Reddy & Partidos, Charalambos & Sampath Kumar, Halmuthur & Muller, Sylviane. (2017). An Overview of Novel Adjuvants Designed for Improving Vaccine Efficacy. Trends in Pharmacological Sciences. 38. 10.1016/j.tips.2017.06.002.
17. Spibey et al, 2006. A canine parvovirus type 2 vaccine protects dogs following challenge with a recent type 2c strain. Proceedings of the 2006 World Congress WSAVA/FECAVA/CSAVA. Prague, October 11 to 14, 885-886.
18. K. De Mari et al. Treatment of canine parvovirus enteritis with interferon-omega in a placebo-controlled field trial, Veterinary Record (2003) 152, 105-108.

Leucofeligen® FeLV/RCP, Leucogen®, Feligen® RCP, Canigen® Rabies, Canigen® DHP, Canigen® DHPPI, Canigen® Pi, Canigen® Bb, Canigen® KC, Canigen® Parvo-C, Canixin® DHPPI/L, Canixin® L, Canigen® Lepto4, Virbagen® Omega. POM-V

Please see product SPCs for more information on any of the vaccines listed in this brochure.

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