



IPNV ELISA KIT

BIO K 282/1 - BIO K 282/2

The viral aetiology of infectious pancreatic necrosis (IPN) was proven by Wolf et al. (1960). Three major groups of IPN virus are recognised: ATCC VR 299 (Wolf et al., 1968), Ab and Sp (Vestergard-Jorgensen and Kehlet, 1971). These three groups differ in their seroneutralisation reactions, their ability to grow on various fish cell lines and their pathogenicity. These IPN viruses are much more resistant to various environmental physico-chemical conditions than other Salmonidae viruses, such as VHS. Infection causes sometimes highly variable mortality in the fry from their first feed to the age of about 1,800 degree-days (Dorson and Torchy, 1981). Clinically, the fry exhibit peculiar swimming behavior characterised by rotation around a horizontal axis, abdominal distension that is especially visible in the gastric region, and a mucus-filled digestive tube that is empty of food (Wood et al., 1955). Although IPN virus is primarily pathogenic for certain Salmonidae fry, Dorson et al. (1987) have proven the susceptibility of young pike fry (*Esox lucius*) to the virus, which has also been isolated from a host of other fish species that show no external clinical signs of infection (many cyprinids, eels, etc.). These fish may be reservoirs and physical vectors of the IPN virus (Dorson, 1982).

Reliable Results

The use of monospecific polyclonal antibody as conjugate ensures excellent specificity and very reliable results.

Ease-of-Use

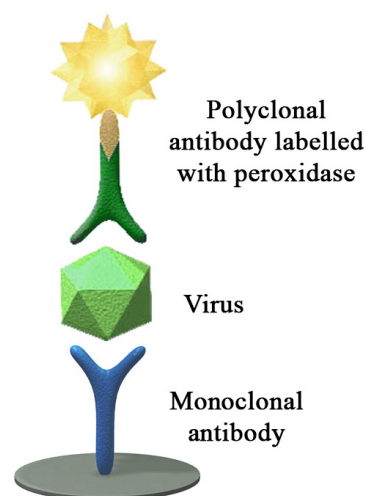
Minimal hands-on-time
Room temperature incubation
Results available in 140 minutes.

Flexibility

Results can be read visually or spectrophotometrically.

EIA Procedure

- 1- Microplate coated with monoclonal antibodies.
- 2- Add samples and positive controls.
Incubate 1 hour at 21°C +/- 3°C
Wash
- 3- Add conjugate.
Incubate 1 hour at 21°C +/- 3°C .
Wash
- 4- Add chromogen (TMB)
Wait 10 minutes.
Add stop solution.
Read at 450 nm





Example of results

Cell culture

RTG-2, CCLV, Rainbow trout gonade

FHM, CCLV, Feed head minnow

EPC, CCLV, Epitheilioma papulosum cyprini

Viruses Names	Strains
VHS1014	strain TUV, Denmark
VHS1015	Riemser VHS-Vakzine
VHS1016	reference strain Klapmølle (Denmark)
VHS1017	reference strain 23.75 (France)
VHS1018	Ö62/96, Österreich
VHS1019	Strain 07/71, France
VHS1020	reference strain Voldbjerg (Denmark)
VHS1022	Laborstamm Fi13 (ENZMANN)
VHS1034	Laborstamm Fi13 (ENZMANN)
VHS1036	Isolat 05/00, Deutschland
VHS1037	marine isolate IP8 (herring)
VHS1038	Isolat DF72/94 (Germany)
VHS-Pool 1039/40/41	Laborstamm Fi13 (ENZMANN),TV-Infektionsvirus
SVC1231	Isolat VF, Deutschland
SVC1232	Isolat
SVC1233	Isolat DF 17/00, Deutschland
SVC1234	Isolat DF 17/00 (Germany)
SVC1238	reference strain RC 56/70 (FIJIAN)
IHN252	Isolate 4008, Italy
IHN259	Isolat Df 04/99, Deutschland
IHN260	Isolat KINKELIN; France
IHN274	Isolate 4008, Italy
IHN280	isolate 233 (Germany)
IPN449	reference strain Abild, Ab (Denmark)
IPN450	reference strain Spjarup, Sp (Denmark)
IPN451	Birnavirus II, CRL Aarhus, Denmark
IPN452	reference strain Abild, Ab (Denmark)
IPN453	reference strain VR299 (U.S.A.)
IPN455	reference strain VR299 (U.S.A.)
IPN457	reference strain Abild (Denmark)
IPN459	reference strain Spjarup, Sp (Denmark IPN455)





Sensitivity IPNV Batch: IPN06D24 Datum 19.06.06

Virus Titre	IPN459 (8.0/ml)	IPN457 (NT/ml)	IPN452 (8.0/ml)	IPN451 (5.5/ml)	IPN453 (NT/ml)	IPN450 (7.0/ml)	IPN449 (4.5/ml)	IPN455 (6.0/ml)
Dilution								
10 ⁰	2.478 +	1.878 +	2.011 +	2.768 +	1.854 +	2.477 +	2.127 +	0.336 +
10 ¹	2.032 +	1.867 +	1.756 +	1.687 +	2.017 +	2.203 +	1.897 +	0.133 -
10 ²	0.461 +	0.796 +	0.620 +	0.682 +	0.584 +	0.636 +	0.299 +	0.104 -
10 ³	0.032 -	0.373 +	0.006 -	0.186 +	0.096 -	0.074 -	0.072 -	0.016 -
10 ⁴	0.221 +	0.206 +	0.167 +	0.021 -	0.047 -	0.05 -	0.035 -	0.106 -
10 ⁵	0.195 +	0.174 +		0.115 -	0.197 +	0.024 -	0.095 -	0.197 +
Titre	6.0/ml	?/ml	4.0/ml	2.5/ml	?/ml	5.0/ml	2.5/ml	6.0/ml
Positive control from the kit: 2.180								

Specificity IPNV Batch: IPN06D24 Datum 05.07.06

Strains (pool)	Dilution	OD	Status
IHN260	undiluted	0.049	negative
IHN274	undiluted	0.033	negative
IHN280	undiluted	0.016	negative
VHS1037	undiluted	-0.015	negative
VHS1038	undiluted	0.004	negative
IHN280	undiluted	-0.011	negative
Positive control			Valid





Composition of the kit

BIO-X IPNV ELISA KIT : BIO K 282

	BIO K 282/1	BIO K 282/2
Microplates	1 (48 tests)	2 (96 tests)
Washing solution	1 X 100 ml (20 X)	1 X 100 ml (20 X)
Conjugate	1 X 12 ml (1 X)	1 X 25 ml (1 X)
Positive control	1 X 2 ml (1 X)	1 X 4 ml (1 X)
Single component TMB	1 X 12 ml (1 X)	1 X 25 ml (1 X)
Stopping solution	1 X 6 ml (1 X)	1 X 15 ml (1 X)

Stability : One year between +2°C and +8°C

