



Cat 4MID[®] Kit (Ref. 4VDX-19K10) A Functional Assay of Sperm Quality and Male Fertility

Cat 4MID[®] Kit Main Advantages

- Based on a **functional sperm parameter** called proAKAP4
- Only a **few microliters required**
- Works with **fresh, chilled** or **frozen semen** in extenders
- **Easy to use**, robust and cost-saving testing kit

Cat 4MID[®] Kit Description

The **Cat 4MID[®] Kit (Ref. 4VDX-19K10)** is a robust ELISA kit that contains all reagents and buffers required for the quantification of proAKAP4 protein in all types of cat semen samples.



Product reference

4VDX-19K10

Specificity

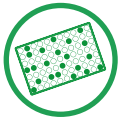
Cat proAKAP4

Analytical range

0 - 150 ng

Number of analysis

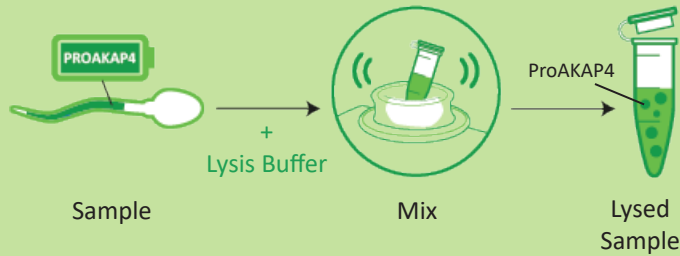
1 to 88 samples



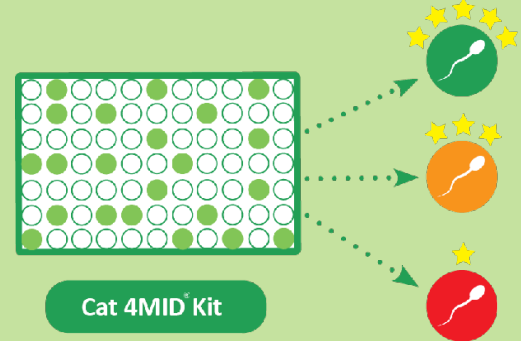
Cat 4MID® Kit (4VDX-19K10)

An Innovative Approach to Assess Sperm Quality

Step one: Release of ProAKAP4



Step two: Quantification of ProAKAP4



Applications of the Cat 4MID® Kit:

- Semen quality assessments
- Qualification of each ejaculate / each straw
- Functional indicator of male fertility
- Selection of sperm with long-lasting motility



Background: ProAKAP4 is a Functional Marker of Sperm Motility and Male Fertility

ProAKAP4 is the **precursor of AKAP4** that is a structural protein playing a key role in **sperm motility, capacitation and fertility**. Spermatozoa **without proAKAP4** are abnormal, immobile and **infertile**. The concentration of the proAKAP4 marker is a **good indicator of sperm quality and fertility** and of how the spermatozoa will stay motile and fertile over time.



Main References

- Huffmeyer et al. (2021) Anim. Reprod. Sci. Vol. 226:106698
Carracedo et al. (2020) Animal Reproduction Science. Vol. 220: 106448
Griffin et al. (2020) Reproduction. Vol. 20: 0284
Nixon et al. (2019) Front Cell Dev Biol. Vol. 7(319): 1-18
Delehedde et al. (2019) Int J Gynecol and Reprod Sci. Vol. 2(1): 13-19
Blommaert et al. (2019) Theriogenology. Vol. 131:52-60
Sergeant et al. (2019) Dairy Vet. Sci. J. Vol. 11(1): 803-811