





# Ram 4MID<sup>®</sup> Kit (Ref. 4VDX-18K7) A Functional Assay of Sperm Quality and Male Fertility

#### **Ram 4MID<sup>®</sup> 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

## **Ram 4MID<sup>®</sup> Kit Description**

The **Ram 4MID<sup>®</sup> Kit (Ref. 4VDX-18K7)** is a robust ELISA kit that contains all

reagents and buffers required for the quantification of proAKAP4 protein in all types of ram semen samples.



Product reference	4VDX-18K7
Specificity	Ram proAKAP4
Analytical range	0 - 150 ng
Number of analysis	1 to 88 samples

www.4biodx-breeding.com



#### Ram 4MID<sup>®</sup> Kit (4VDX-18K7) An Innovative Approach to Assess Sperm Quality





## Applications of the Ram 4MID<sup>®</sup> 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**

Riesco et al. (2020) Biomolecules. Vol. 10(7):E1046. Carracedo et al. (2020) Animal Reproduction Science. Vol. 220:106448 Sergeant et al. (2019) Dairy & Veterinary Sciences. Vol. 11(1):1-6 Fang et al. (2019) Developmental Biology. Vol. 1606(19):30107-1017 Delehedde et al. (2018) Animal Reproduction Science. Vol. 194:24 Sergeant et al. (2016) Animal Reproduction Science. Vol. 169:125-126

