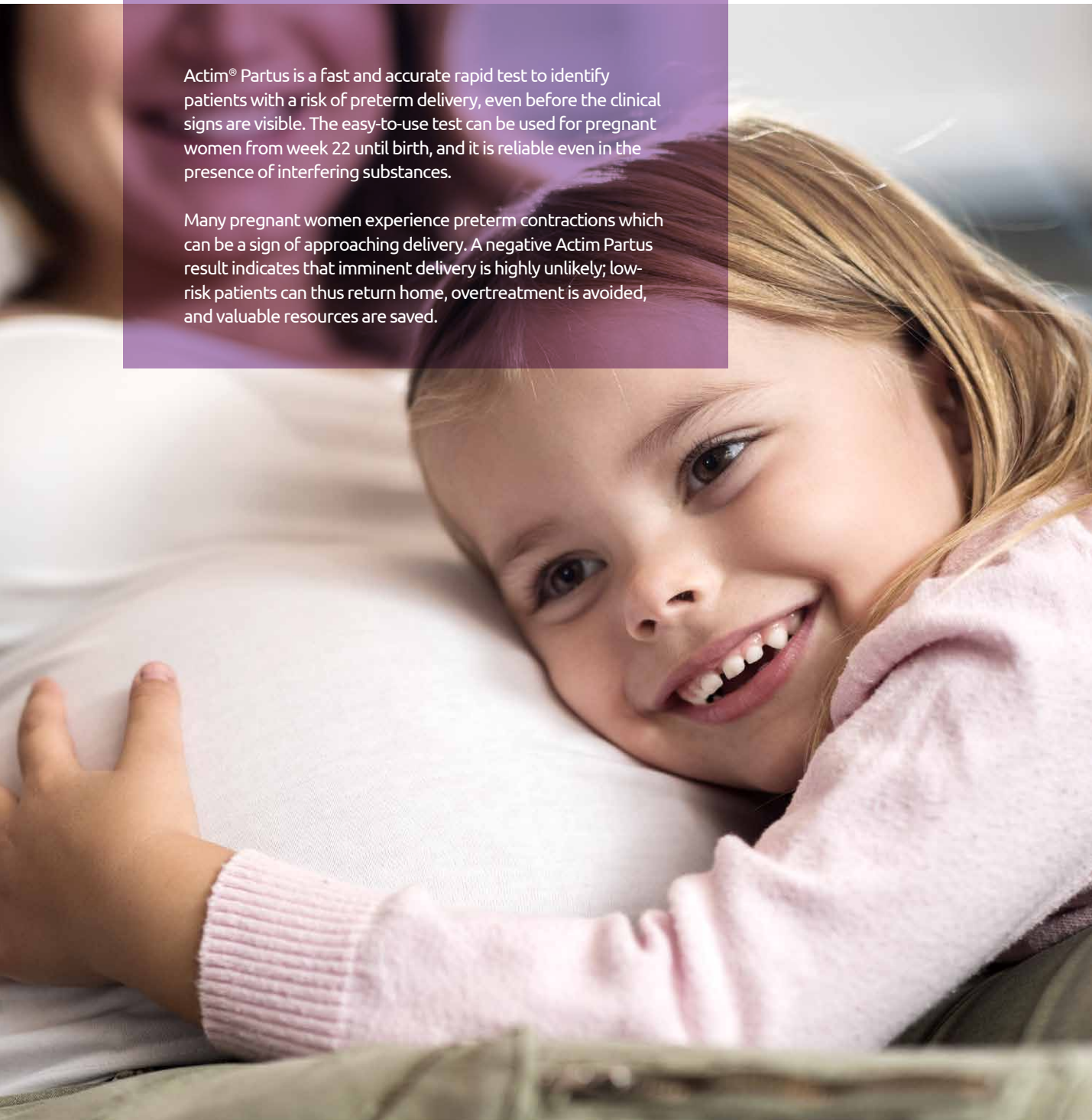



Actim[®] Partus

Simple bedside test for ruling
out the risk of preterm or
imminent delivery

Actim[®] Partus is a fast and accurate rapid test to identify patients with a risk of preterm delivery, even before the clinical signs are visible. The easy-to-use test can be used for pregnant women from week 22 until birth, and it is reliable even in the presence of interfering substances.

Many pregnant women experience preterm contractions which can be a sign of approaching delivery. A negative Actim Partus result indicates that imminent delivery is highly unlikely; low-risk patients can thus return home, overtreatment is avoided, and valuable resources are saved.





Actim Partus is already **in use all over the world**, and it has been included in several national treatment guidelines.

Actim Partus can be used **from week 22 onwards** when fetal membranes are intact.

Actim Partus is a **one-step** dipstick test, and gives **results in just 5 minutes** with sampling completed in seconds.

Most women remain sexually active during pregnancy, and because **intercourse and semen do not interfere** with the Actim Partus results, there is no need to rule out these patients.

Actim Partus test results **are not affected** by vaginal medicatons, infections, or various other interfering factors.

Cervical phIGFBP-1 indicates preterm delivery

Actim Partus rapid test is based on unique and highly specific monoclonal antibodies that bind to the phosphorylated form of insulin-like growth factor binding protein-1 (phIGFBP-1). PhIGFBP-1 produced in the fetal decidua, leaks into the cervix when the decidua and chorion detach as a sign of approaching delivery.

The presence of phIGFBP-1 can be detected with a dipstick test even before these changes become clinically visible. This makes phIGFBP-1 a reliable marker for estimating the risk of preterm or imminent delivery.

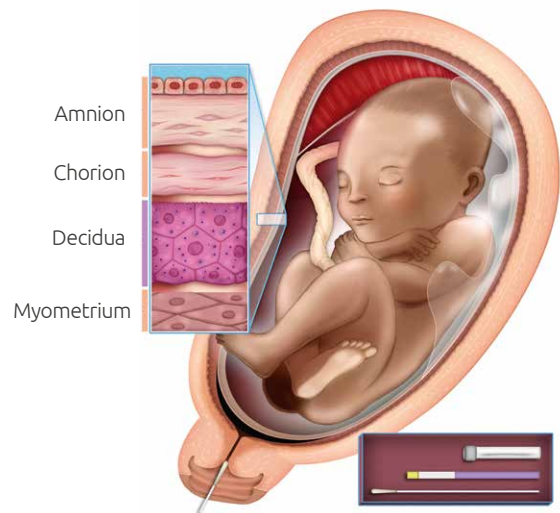


Figure 1. Actim Partus identifies the risk of preterm delivery (PTD) through a simple cervical swab sample.

Preterm delivery or harmless contractions?

Half of pregnant women experience symptoms, yet only 20% of these are at real risk of imminent or preterm delivery. Identifying patients who have harmless contractions can be difficult. In practise, this means that over-diagnosis and over-treatment are often the only option.

Actim Partus supports clinical decision making by helping correct PTD diagnosis. **Patients who don't require immediate medical attention can be sent home, instead of treating all patients who have preterm contractions.** This saves time and cost for both the patient and hospital.



A positive Actim Partus test result

- A phIGFBP-1 concentration is 10 µg/l or more in the cervical fluid extract, meaning tissue damage.
- The patient has a higher risk of PTD and should be evaluated for treatment aiming at delaying the delivery or preparing the baby for delivery.
- Early identification of patients at real risk of PTD allows timely interventions.



A negative Actim Partus test result

- phIGFBP-1 concentration is less than 10 µg/l in the extracted sample, meaning no significant tissue damage.
- The patient can be sent home unless otherwise clinically indicated, as delivery is highly unlikely within the next 1–2 weeks.
- Unnecessary treatments with potential side effects can be avoided, the mother is given peace of mind, and hospital resources are saved.
- More than 2/3 of the symptomatic women get a negative result.

Actim Partus rules out false alarms

Clinical evidence from multiple studies shows that Actim Partus has a very high negative predictive value (NPV), and is therefore a reliable tool to rule out the risk of imminent or preterm delivery. Its high sensitivity, in turn, makes it effective in predicting preterm or imminent delivery.

Because Actim Partus is specific to pHIGFBP-1, tests can be completed even in the presence of semen, urine, infections, and medical products.

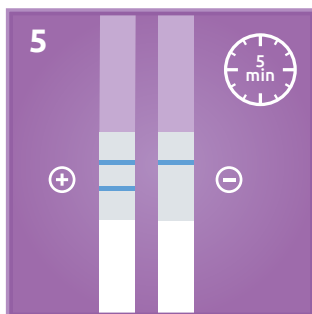
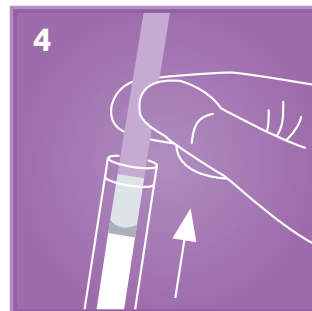
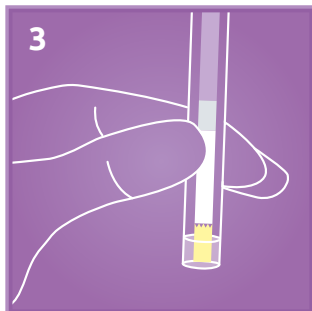
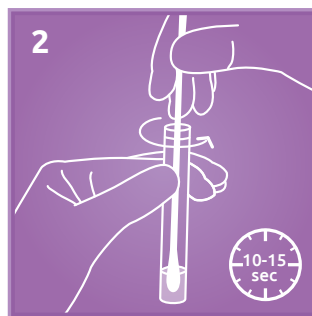
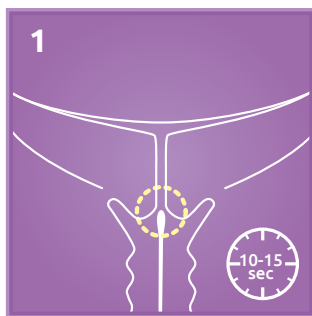
Table 1. Clinical evidence of Actim Partus as a predictor of imminent delivery.

Reference	n	GA (wk)	End point	Sensitivity	Specificity	PPV	NPV
Tripathi et al., 2016	468	28–36	7 d	95 %	92 %	86 %	97 %
Azlin et al., 2010	51	24–36	7 d	80 %	94 %	57 %	98 %
Brik Spinelli et al., 2010	276	24–34	7 d	73 %	66 %	22 %	95 %
Tanir et al., 2009	68	24–37	7 d	93 %	79 %	56 %	98 %
			14 d	61 %	80 %	68 %	74 %
Eroglu et al., 2007	51	24–35	7 d	83 %	84 %	42 %	97 %
Ting et al., 2007	94	24–34	7d	69 %	78 %	39 %	92 %
			14 d	72 %	80 %	46 %	92 %
Lembet et al., 2002	36	20–36	7 d	94 %	85 %	83 %	94 %

Table 2. Clinical evidence of Actim Partus as a predictor of preterm delivery before week 32–37.

Reference	n	GA (wk)	End-point	Sensitivity	Specificity	PPV	NPV
Tripathi et al., 2016	468	28–36	< 37 weeks	81 %	97 %	95 %	88 %
			< 34 weeks	94 %	89 %	78 %	97 %
Riboni et al. 2011	210	24–34	< 34 weeks	64 %	86 %	24 %	97 %
Brik Spinelli et al., 2010	276	24–34	< 32 weeks	76 %	66 %	18 %	96 %
Tanir et al., 2009	68	24–37	< 34 weeks	70 %	75 %	48 %	89 %
Eroglu et al., 2007	51	24–35	< 35 weeks	70 %	88 %	58 %	92 %
Akercan et al., 2004	45	24–36	< 37 weeks	78 %	87 %	73 %	90 %
Lembet et al., 2002	36	20–36	< 37 weeks	90 %	94 %	94 %	89 %

Fast results at the bedside in minutes



1. Collect sample
2. Extract specimen
3. & 4. Activate the test
5. Interpret results



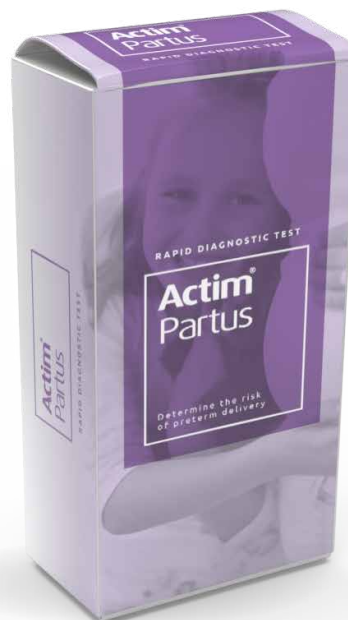
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Ordering information

Actim Partus 10 test kit	31931ETAC
Actim Partus 1 test	31930ETAC
Actim Partus Controls	31900ETAC

Combine Actim Partus with Actim PROM

The most accurate test for detecting premature rupture of fetal membranes.




Actim Oy

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 Test kit contains all necessary materials and can be stored at room temperature.

Selected references

1. Akercan F et al. Value of cervical phosphorylated insulinlike growth factor binding protein-1 in the prediction of preterm labor. *J Reprod Med* (2004) 49: 368-372.
2. Altinkaya O et al. Cervical phosphorylated insulin-like growth factor binding protein-1 in prediction of preterm delivery. *Arch Gynecol Obstet.* (2009) 279:279-283.
3. Azlin MI et al. Role of pHIGFBP-1 and ultrasound cervical length in predicting pre-term labour. *Journal of Obstetrics and Gynaecology* (2010) 30:456–460.
4. Briki Spinelli M et al. Phosphorylated insulin-like growth factor binding protein-1 and cervical measurement in women with threatening preterm birth. *Acta Obstet Gynecol Scand* (2010) 89:268–74.
5. Chen MX, Dansereau J, Hoag GN. Comparison of Fetal Fibronectin and Phosphorylated Insulin-Like Growth Factor Binding Protein-1 Testing to Predict Preterm Delivery in Symptomatic Women: A 10-Year Retrospective Study. *Obstet Gynaecol Can.* (2020) 42:971-976.
6. Eroglu D et al. Prediction of preterm delivery among women with threatened preterm labor. *Gynecol Obstet Invest* (2007) 64:109-116.
7. Kekki M et al. Insulin-like growth factor-binding protein-1 in cervical secretion as a predictor of preterm delivery. *Acta Obstet Gynecol Scand* (2001) 80:546-551.
8. Lembet A et al. New rapid bed-side test to predict preterm delivery: phosphorylated insulin-like growth factor binding protein-1 in cervical secretions. *Acta Obstet Gynecol Scand* (2002) 81:706–712.
9. Riboni F et al. Biochemical markers predicting pre-term delivery in symptomatic patients: phosphorylated insulin-like growth factor binding protein-1 and fetal fibronectin. *Arch Gynecol Obstet.* (2011) 284:1325-9.
10. Rutanen EM Insulin-like growth factors in obstetrics. *Opin Obstet Gynecol* (2000) 12:163-168.
11. Tanir HM, Sener T, Yildiz Z. Cervical phosphorylated insulin-like growth factor binding protein-1 for the prediction of preterm delivery in symptomatic cases with intact membranes. *J Obstet Gynaecol Res* (2009) 1:66–72.
12. Ting HS et al. Comparison of bedside test kits for prediction of preterm delivery: phosphorylated insulin-like growth factor binding protein-1 (pIGFBP-1) test and fetal fibronectin test. *Ann Acad Med Singapore* (2007) 36:399-402.
13. Tripathi R et al. Comparison of rapid bedside tests for phosphorylated insulin-like growth factor-binding protein 1 and fetal fibronectin to predict preterm birth. *Int J Gynaecol Obstet.* (2016) 135:47-50. Epub 2016 Jun 18.
14. World Health Organization: Media Center. Fact Sheets: Preterm Birth. Updated 11/ 2015. Available in: <http://www.who.int/mediacentre/factsheets/fs363/en/> (accessed 09/2016).

The full reference list can be found on our website.