

Product Specification Sheet

**Musculoaponeurotic Fibrosarcoma Oncogene Family (hMAfF) Antibodies**

Cat # MAFF11-P	Human MAfF Control/blocking Peptide	SIZE: 100 ug
Cat # MAFF11-S	Rabbit Anti-Human MAfF antiserum	SIZE: 100 ul
Cat # MAFF11-A	Rabbit Anti- Human MAfF IgG, Aff pure	SIZE: 100 ug

The hypothalamic **Oxytocin** (OT) is a nine-amino acid peptide, which exerts multiple biological actions as a hormone and as neurotransmitter. OT stimulates uterine smooth muscle and mammary myoepithelial cell contraction, prostaglandin production by uterine endometrial and amnion cells, milk ejaculation from the mammary gland, and induction of specific mating behavior and maternal behaviors. Just before the onset of labor, uterine myometrium becomes extremely sensitive to oxytocin, for which it is a primary target tissue, because of a dramatic increase in the number of oxytocin receptors. OT initiates its physiological activity by interacting with the G protein-coupled **receptor** (GPCR) known as **oxytocin receptor (OTR)**.

The US-2 element in the promoter of the human oxytocin receptor gene (OTR) binds specifically nuclear proteins from human myometrium at parturition. Using the US-2 element in a yeast 1-hybrid system to screen a human myometrium cDNA library, a full-length cDNA encoding the homolog of chicken **musculoaponeurotic fibrosarcoma oncogene family (MAfF)** was isolated. Human **MAfF (hMAfF)** mouse 156-aa, chicken 149-aa, human 164-aa; chromosome 22q12.2-q13.2) is ~18 kDa protein. Like other small MAfF proteins (e.g., MAFG) it contains an extended leucine zipper structure and lacks an N-terminal transactivating domain. MAfF is strongly expressed in term myometrium and from kidney, but not from nonpregnant myometrium. MAFF may play a role in OTR gene upregulation.

**Source of Antigen and Antibodies**

<b>Antigen</b>	15-aa peptide of Human MAFF; <b>Designated (MAFF11-P or control peptide or blocking peptide)</b> conjugated to KLH; <b>epitope location</b> ~ N-terminal, Cytoplasmic domain
<b>Ab Host/type</b>	Rabbit, Polyclonal unpurified antiserum ( <b>#MAFF11-S</b> ) and IgG, purified over antigen-agarose (Cat # <b>MAFF11-A</b> )
<b>2-Ab</b>	Cat # 20320, goat anti-rabbit IgG-HRP (AP, biotin, FITC conjugates also available).
<b>-ve control IgG</b>	# 20009-1, Rabbit (non-immune) IgG, purified, suitable for ELISA, Western, IHC as -ve control

**Form & Storage of Antibodies/Peptide Control**

**Antiserum (unpurified)**  
100ul solution lyophilized powder  
Supplied 0.05% azide, **Reconstitute** powder in 100 ul PBS

**Affinity pure IgG**

100 ug/100ul solution lyophilized powder  
Supplied in **Buffer:** PBS+0.1% BSA  
**Reconstitute powder** in PBS at 1mg/ml

**Control/blocking peptide**

100 ug/100 ul solution lyophilized powder  
Supplied in Buffer: PBS pH 7.5,  
**Reconstitute powder in PBS at 1 mg/ml.**

**Storage**

**Short-term:** unopened, undiluted liquid vials at -20OC and powder at 4oC or -20oC..

**Long-term:** at -20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

**Stability:** 6-12 months at -20oC or below.

**Shipping:** 4oC for solutions and room temp for powder

**Recommended Usage**

**Western Blotting** (1:1K-5K for neat serum and 1-10 ug/ml for affinity pure antibody using ECL technique).

**ELISA:** Control peptide can be used to coat ELISA plates at 1 ug/ml and detected with antibodies (1:10-50K for neat serum and 0.5-1 ug/ml for affinity pure).

**Specificity & Cross-reactivity**

The MAFF11-P peptide sequence is 93% conserved in mouse, and 80% in chicken MAfF. Antibody crossreactivity in various species is not established. Control peptide, because of its low mol. Wt (<3 kDa), is not suitable for Western. It should be used for ELISA or antibody blocking experiments (use 5-10 ug control peptide per 1 ug of aff pure IgG or 1 ul antiserum) to confirm antibody specificity (see detailed protocol see detailed protocol at the web site).

**General References:** 1. Kimura T et al (1999) BBRC 264, 86-92; Inoue T et al (1994) JBC 269, 32451-32456.

\*This product is for In vitro research use only.

Related material available from ADI

Antibodies for AVP-V2 and AVP-V1a/b, hMAfF, AQP1-11, and Urea, Urate Transporter

MAFF11-S-A-P 71213A