Technical Data Sheet

InVivoMAb anti-human/mouse/rat/canine/swine PSMA

Attention: Use of this product constitutes an agreement to Bio X Cell's Terms and Conditions which are included with this product in print and can also be found at https://bioxcell.com/terms-and-conditions.

Lot Specific Information

Lot Number: **Lot Specific***
Volume: **Lot Specific***
Concentration: **Lot Specific* (generally 4 to 11 mg/ml) ***
Total Protein: **Lot Specific***

*This information will be noted on the certificate of analysis that ships with this product.

Product Information

Catalog Number:	**BE0444**
Clone:	**3F11**
Isotype:	Mouse IgG1, κ
Recommended Isotype Control(s):	InVivoMAb mouse IgG1 isotype control, unknown specificity
Recommended Dilution Buffer:	InVivoPure pH 7.0 Dilution Buffer
Immunogen:	Purified recombinant human prostate-specific membrane antigen (rhPSMA)
Reported Applications:	Immunohistochemistry (paraffin) Immunofluorescence Western blot ELISA
Formulation:	PBS, pH 7.0 Contains no stabilizers or preservatives
Endotoxin:	<2EU/mg (<0.002EU/μg) Determined by LAL gel clotting assay
Purity:	>95% Determined by SDS-PAGE
Sterility:	0.2 μm filtered
Production:	Purified from cell culture supernatant in an animal-free facility
Purification:	Protein G
RRID:	
Molecular Weight:	150 kDa

Description

The 3F11 monoclonal antibody reacts with prostate-specific membrane antigen (PSMA) from human, mouse, rat, porcine, and canine species. PSMA is a membrane-bound metallopeptidase that is also known as glutamate carboxypeptidase II (GCPII), folate hydrolase (FOLH1), and N-acetylated-α-linked acidic dipeptidase (NAALADase). PSMA is expressed selectively in the healthy prostate secretory-acinar epithelium and the plasma membranes of epithelial prostate cancer cells. Some of the normal tissues, such as the small intestine, kidney, brain, and salivary glands, also express PSMA at low levels. PSMA exerts both folate hydrolase and NAALAdase activity, and it is required for the uptake of folate in the intestine. PSMA modulates excitatory neurotransmission in the brain through the hydrolysis of the neuropeptide and NAAG, thereby releasing glutamate. Importantly, PSMA is involved in prostate tumor progression, and a substantial upregulation (up to 1000X compared to normal tissues) of PSMA levels is often observed in high-grade, metastatic, and castration-resistant prostate cancer. Besides prostate cancer tissue, PSMA is also overexpressed in the neo-vasculature of several types of solid tumors. Cell surface PSMA is constitutively internalized, and when bound to a ligand (e.g., an antibody), the rate of PSMA internalization and its intracellular retention increase. Due to its restrictive expression and unique internalization ability, PSMA has emerged as an in-demand tumor-associated antigen of interest in immunodiagnostic (especially as a PET imaging biomarker) and immunotherapeutic targeting of prostate cancer and neo-vasculature of solid tumors. Note: This

3F11 antibody is distinct from clone 3/F11 (a different antibody against human PSMA). This 3F11 antibody should not be confused with the 3/F11 antibody as they have different functional activity. This 3F11 antibody shows weak cross-reactivity with NAALAD2 (GCPIII) and is not recommended for flow cytometry, or in vitro/in vivo functional applications. For more details on the development and characterization of 3F11, please refer to Novakova et al., 2017, Prostate, 77: 749-764.

Storage

Store at the stock concentration at 4°C. **Do not freeze.**
It is not uncommon for a floccule or precipitate to appear during storage. The floccule is typically buffer salts precipitating out of solution or a small bit of protein aggregation. For information on how to remove floccules or precipitates see our FAQ's at https://bioxcell.com/faqs.

Protocol Information

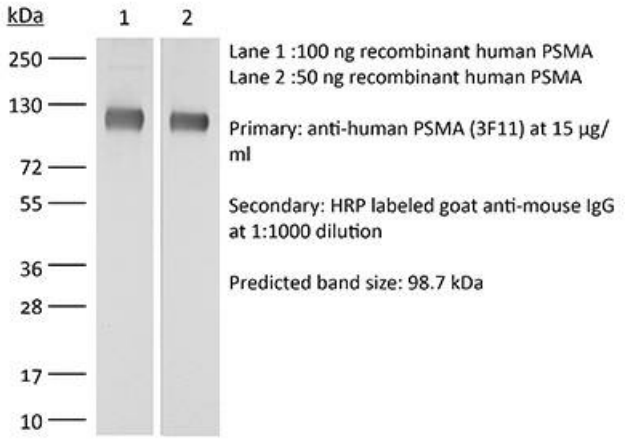
Since applications vary, each investigator should use the application references as a guide to help estimate the appropriate dose or concentration. The dose or concentration can be further optimized experimentally in a dose response or titration experiment.

Application References

For a complete list of references, visit https://bioxcell.com/catalogsearch/result/?q=BE0444#tab_references or scan the QR code below.

Binding Validation

Validation data shown below confirms that this clone binds to its target antigen. For lot specific binding validation data, e-mail technicalservice@bioxcell.com.



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